

**County of Loudoun**  
**Department of Planning**  
**MEMORANDUM**

**DATE:** August 21, 2008

**TO:** Stephen Gardner, Project Manager  
Land Use Review

**FROM:** Sarah Milin, Planner *Sarah*  
Community Planning

**SUBJECT: SPEX 2007-0029, West Spine Plaza 2<sup>nd</sup> Referral**

**PROJECT DESCRIPTION**

The Applicant, DCI Construction Management, Inc., is requesting a Special Exception to allow a bank with three drive-through lanes, a convenience store with gas pumps, two restaurants (one standalone and the other within a hotel), and ground-floor retail within an office building on the subject property. The proposed Special Exception uses will accompany several permitted uses on the parcel, including a hotel with a restaurant and conference center, flex-industrial space, office, and warehouse uses. Overall, approximately 164,865 sq ft of uses are proposed in seven buildings on the 20.06-acre property along with a pedestrian plaza, vehicular travel lanes, and parking areas. The following table summarizes the uses, both permitted and by Special Exception, that are proposed in West Spine Plaza:

Summary of Proposed Uses by Building

Building	Use	SPEX/Permitted	# Floors	Sq. Footage
A	Flex Industrial / Office	Permitted	1 story	28,987 sq ft
B	Convenience store with gas pumps	SPEX	1 story	4,000 sq ft
C	Restaurant	SPEX	1 story	5,000 sq ft
D	Hotel with accessory restaurant	Permitted/SPEX	4 stories	49,828 sq ft
E	Conference Center	Permitted	1 story	11,550 sq ft
F	Office with Ground Floor Retail	Permitted/SPEX	3 stories	61,000 sq ft
F	Bank with drive-through facilities	SPEX	1 story	4,500 sq ft
TOTAL				164,865 sq ft

Source: Special Exception Plat, Revised July 30, 2008



Vicinity Map

The property is currently zoned CLI (Commercial - Light Industry) and is located on the south side of Route 50, just east of Gum Springs Road (Route 659) (see vicinity map to the left). The West Spine Road bisects the site in a north-south direction. Two lanes of this planned four-lane roadway are currently built through the site.

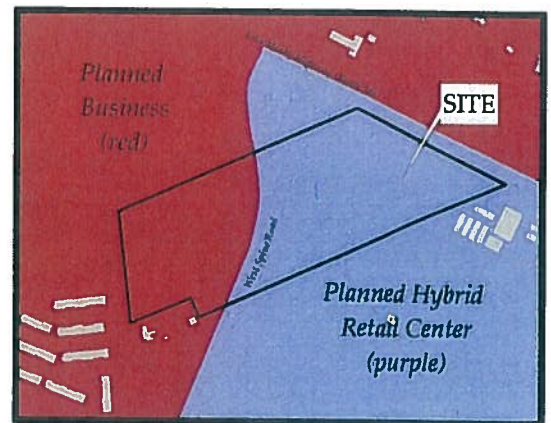
The Applicant has submitted a response to Community Planning's first referral, dated November 26, 2007. Below is a discussion of the outstanding issues that should be addressed

in order for the application to fully conform to the Revised General Plan. This referral is intended to be supplementary to the first referral.

## OUTSTANDING ISSUES

### 1. Land Use

The subject property is located within the Dulles Community of the Suburban Policy Area and is planned for both Business Community and Hybrid Retail Center uses (see planned land use map on the left) (*Arcola Area/Route 50 Corridor Plan, Planned Land Use Map*). The West Spine Road generally forms the boundary between the two land uses on the subject property, with Business to the west and Hybrid Retail Center to the east.



Planned Land Use

#### a. **Business Community**

The Arcola Area/Route 50 Corridor Plan states that areas designated Business in the Route 50 Corridor shall be subject to the policies and land use mix ratios of Chapter 6 except as modified or supplemented by the Corridor Plan (*Arcola Area/Route 50 Corridor Plan, Policy 1, pg. 5*). The Revised General Plan calls for planned Business areas to develop as either a Regional Office or a Light Industrial development. Such developments can include a mix of land uses, including commercial retail and services, but regional office uses should constitute the majority of



the land area (*Revised General Plan, text, pg. 6-28 and 6-29*). In the Route 50 corridor, in order to address the deficit of retail uses and the potential for tourism in this area, the County can consider retail/commercial service uses that exceed the 10 percent maximum set out for Business Communities in Chapter 6 as long as the following criteria are met:

- 1) The retail use provides the goods and services needed by local employment and residential communities and/or supports the development of tourism in the Route 50 corridor;
- 2) The retail use is compatible with and can illustrate a coordinated design, transportation connection or other relationship with the surrounding communities that exist or have been approved;
- 3) The retail use does not access Route 50 directly;
- 4) The proposal provides adequate and appropriate transportation infrastructure; and
- 5) The proposal conforms to policies in the Retail Plan (*Arcola Area/Route 50 Corridor Plan, Policy 2, pg. 5*).

Within the portion of the site planned for Business uses, the application proposes a permitted office/flex industrial warehouse facility and the following Special Exceptions uses: a restaurant and a convenience store with gas pumps. The proposed land use mix is dominated by commercial retail and service uses (i.e., these uses encompass approximately 50% of the site's planned Business area) and is therefore not consistent with the land use mix for a business community. In the first referral, staff found that the proposal met only three of the five criteria (#3 – 5) needed to justify additional retail in planned Business areas. Staff described the additional information and project revisions that were needed for the project to meet the first two criteria.

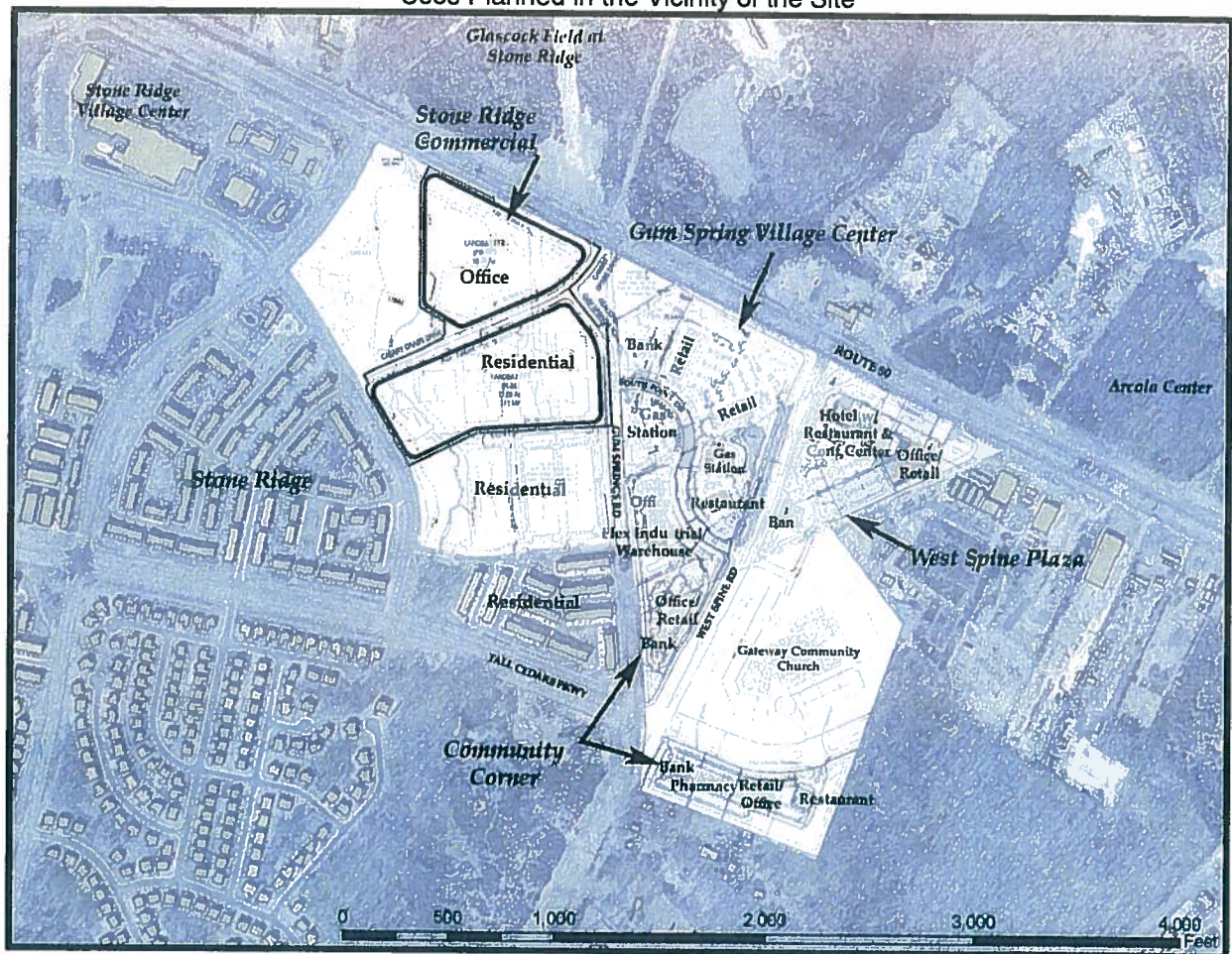
*Criteria #1: The retail use provides the goods and services needed by local employment and residential communities and/or supports the development of tourism in the Route 50 corridor.*

In the first referral, staff questioned the need for additional retail in the area given that the same uses have already been approved or are anticipated in the site's immediate vicinity. Staff requested additional information regarding the market area of the proposed gas station and restaurant to determine whether a need for such uses exist and will not be fulfilled by the other projects planned in the vicinity of the site. The Applicant has responded by stating that an additional gas station and restaurant use would help meet the demand for these uses from existing and proposed households in the Dulles Planning Area and cited residential growth statistics in this area from the County's 2007 Growth Summary.

However, the Route 50 Corridor Retail Market Analysis prepared for Loudoun County and completed May 1, 2006 indicates that supportable retail space in this area in the year 2030 will only be 2,373,532 square foot of retail based on the maximum buildout

scenario. The retail projects that have been approved and built already exceeds the anticipated supportive retail for this area. Given these findings and that the same retail uses that are proposed with this application are already planned in the site's immediate vicinity, staff does not find that the proposal adequately justifies exceeding the 10% maximum for retail/commercial service uses established in the Plan for Business Communities.

Uses Planned in the Vicinity of the Site



The proposed retail uses are also not consistent with policies for service-area based retail uses in the Retail Plan. First, Plan policies call for the separation of service-area based retail by a minimum of 4,000 feet (*Retail Plan, Policy A4, pg. 15*). Not only is the project site immediately adjacent to the retail uses planned at Gum Spring Village and Community Corner, it is also within 4,000 feet of the Stone Ridge Village Center. Furthermore, service-area based retail uses should be located internally to the areas they are intended to serve since they are not intended to attract "drive-by" shoppers or function as destination retail (*Retail Plan, Policy A1, pg. 14*). The proposed retail uses on the



ground floor of the office building provides the internal location and will presumably serve the employees of the office building, as called for by the Plan. However, the retail uses proposed west of the West Spine Road are located at the periphery of the site and will likely largely depend upon "drive-by" shoppers.

Overall, staff continues to have concerns regarding the amount of retail and commercial service uses that are existing, approved and proposed within the planned Business areas south of Route 50. The developments here largely do not advance the Plan's vision for Business Communities; rather than having significant office development, the predominant land use appears to be strip commercial development. This area has the



Retail along Route 50 in Fairfax County

potential to develop as strip retail development similar to that found along Route 50 in Fairfax County, in contradiction to the Plan's vision. The Route 50/West Spine Road intersection will likely in the future become a desirable place for larger-scaled office development due to its location. Although the Applicant proposes some office within the planned Business area, it is not significant (only 10,000 sq ft) and is part of a 1-story building containing flex industrial/warehouse uses.

***Staff finds that the project does not meet the first criteria needed to justify increased retail in the Route 50 corridor. Staff recommends that the application be revised to provide a land use mix where more significant office development is proposed and the retail component more closely reflects the 10% ratio envisioned in the Plan. Community-serving office development rather than Class A office space would be appropriate at this location.***

*Criteria #2: The retail use is compatible with and can illustrate a coordinated design, transportation connection or other relationship with the surrounding communities that exist or have been approved.*

In the first referral, staff stated that the proposal is compatible with the office, commercial retail and residential uses that surround the subject site. Staff, however, raised concerns that no pedestrian linkages were proposed along South Point Drive or the West Spine Road although the Applicant states as justification for the proposed application that the goods and services will be provided that are supportive of the growing residential population in this area.

The Special Exception plat has been revised to depict the pedestrian linkages that are proposed, including a 10-foot wide trail along a portion of Route 50 (transitioning to a 14-foot easement), two four-foot wide sidewalks along South Point Drive, and a 10-foot wide shared use path running along the east side of the West Spine Road. Internal to the development, the Applicant has provided a network of sidewalks that connects the different uses, including crosswalks to alert drivers to watch for pedestrians. The response to referral comments also states that the Applicant is willing to provide bicycle racks on the site. However, there are several significant pedestrian facilities that have not been adequately provided that may compromise the developing trail network in the area.

***Staff recommends that the sidewalks along South Point Drive be widened to five feet in order to be consistent with Plan policies stating that sidewalks within the Suburban Policy Area be a minimum of 5 to 6 feet wide (Bike/Ped Plan, Recommended Walkway Types, pg. 41).***

***Staff further recommends that a 10-foot wide shared use path be provided on the west side of the West Spine Road in addition to the east side. The future West Spine Road is identified in the Bike/Ped Plan as a baseline connecting roadway and envisions that such roadways will be equipped with minimum 10-foot wide off-road, shared-use paths on both sides. Staff notes that similar commitments have been included in the Proffers of several other land use applications along the West Spine Road, including Community Corner (ZMAP 2006-0024 & SPEX 2006-0037), Providence Glen (ZMAP 2002-0023), Yardley (ZMAP 2006-0019), Treburg (ZMAP 2004-0019) and Masira (ZMAP 2003-0004).***

***Staff also recommends that the Applicant provide a 10-foot trail along their entire Route 50 frontage in place of the proposed 14-foot trail easement. Although the future Route 50/West Spine Road interchange will impact this portion of the trail when it is built, a complete pedestrian and bicycle network along Route 50 is needed until this time.***

***The trail along the property's southern property boundary east of the West Spine Road should be extended throughout the site to the Gateway Community Church property. Staff also recommends that pedestrian and bicycle facilities be provided from the trail along West Spine Road to the proposed hotel and from South Point Drive to the proposed restaurant.***

***Lastly, staff recommends that the application commit to (1) enhanced pedestrian crosswalks that include raised crosswalks and/or changes in textures, patterns and***

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***colors to distinguish between pedestrian and vehicular movement and (2) a minimum number and capacity of bicycle racks.***

**b. Hybrid Retail Center**

On the portion of the site planned for Hybrid Retail Center uses, the application proposes a 4-story hotel with a restaurant and a conference center, a 3-story office building with ground-floor retail, and a freestanding bank with drive-through facilities. Of these uses, the restaurant within the hotel, the ground-floor retail within the office building, and the bank require Special Exception approval. In the first referral, staff found that the proposed Special Exception uses east of the West Spine Road are consistent with its Hybrid Retail Center planned land use designation, which calls for the development of retail uses that provide for convenience and routine shopping needs and can also incorporate some larger-scale retailers that are typically characterized as Destination Retail (*Arcola Area/Route 50 Corridor Plan, Policy 1, pg. 6*).

Staff, however, recommended that the Applicant coordinate interparcel access with the property owner (Meadows Farms, Inc.) immediately east of the site, consistent with Plan policies for the Route 50 corridor discouraging strip retail development and encouraging the consolidation of CLI properties in order to achieve coordinated development with minimal access points (*Arcola Area/Route 50 Corridor Plan, Policy 4, pg. 7*). In their response to referral comments, the Applicant stated that they have concerns with staff's assessment of the interparcel access with the adjacent property, specifically that the property owner to the east is a much more intensive land use and it is inappropriate for the trucks that use this property to access through the West Spine Plaza. The Applicant suggested that an interparcel access point located elsewhere, possibly to the south of the West Spine Plaza, is more appropriate.

***Staff agrees that interparcel access with the property to the east may not be appropriate at this time. However, such access may be desirable sometime in the future should this property redevelop with uses that are compatible with those proposed in this application. This property is also located within the planned Hybrid Retail Center area. This application should anticipate and accommodate this possible future situation. Staff therefore recommends that a "possible future interparcel access" point be designated on the Special Exception plat.***

**2. Site and Building Design**

In the first referral, staff expressed concern that the proposed project did not fully emulate the design characteristics desired in the Arcola Area/Route 50 corridor. On February 20, 2007, the Board of Supervisors approved the Route 50 Corridor Design Guidelines which, in addition to Plan policies, apply to the subject site. The County seeks to foster a high-quality appearance and reinforce a sense of place along the Route 50 corridor through the use of

pedestrian-oriented development, distinctive architecture and details, enhanced landscaping, and by reducing the visual impact of parking and service areas. New development patterns should use compact building arrangements to frame streetscapes and screen parking and service areas; incorporate high-quality streetscape elements such as lighting, signage and furniture; and place the majority of the parking areas out of view and reduce their scale and impact (*Route 50 Corridor Design Guidelines*, pgs. 28 - 45). Plan policies also discourage strip development of any type and provide many design characteristics envisioned for retail uses (*Revised General Plan*, Policy 11, p. 6-7 and *Retail Plan, Design Guidelines*, pg. 19 - 21). Several site design changes were recommended in the first referral so that the project would more closely conform to the County's vision for the Route 50 corridor. Staff also requested information or renderings of the proposed architectural design of the buildings and recommended conditions that all the buildings be unified and exhibit a high quality of design and materials and that all mechanical equipment will be screened.

Since the first submission, the proposed site layout has not been substantially changed. The Special Exception plat has been revised to switch the orientation of the proposed restaurant and gas station west of the West Spine Road; the restaurant is now south of the proposed gas station and closer to South Point Drive. A detailed landscape plan and external and internal pedestrian linkages have also been provided with this submission. Regarding the architectural design of the buildings, the Applicant in their response to referral comments states that revised renderings of the proposed buildings will be provided when they become available; regardless, the buildings will be unified and exhibit a high quality of design and materials. The Applicant also stated a willingness to commit to screening of mechanical equipment.



The Main Street Project is an example of the high-quality design envisioned in the Route 50 corridor.

While certain portions of the site conform to the County's vision for the Route 50 corridor (in particular the proposed hotel and office building which are adjacent to one another and connected by a pedestrian plaza), the majority of the site continues to resemble a strip commercial development, inconsistent with Plan policies. Instead of a compact, pedestrian-oriented development, several standalone buildings and retail pad sites are proposed that are surrounded, and separated from one another, by surface parking areas. Throughout the proposed development, parking areas are placed adjacent to both South Point Drive and the West Spine Road and will be visible from both roadways.

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Staff recognizes that many of the proposed uses are vehicular-oriented, particularly the gas station and the drive-through bank, and therefore pose a design challenge to more compact, pedestrian-oriented development. However, a number of other developments in the Route 50 corridor have achieved an innovative design despite their vehicular-oriented uses. For example, Main Street Car Wash & Lube, east of the site, uses distinctive architecture, enhanced pedestrian connections, ample streetscape amenities, and high-quality stormwater management design to create a high quality appearance.

***Staff recommends that the proposed layout be revised to create a more compact, pedestrian-oriented development. One way to accomplish this is by relocating the proposed drive-through bank northward so that it has a stronger relationship with the other buildings (the hotel, conference center, and office building) proposed east of the West Spine Road. Alternatively, should the proposed land use mix not be revised, it may be appropriate to provide the more vehicular-oriented uses (i.e., the gas station and the drive-through bank) west of the West Spine Road and relocate the proposed restaurant adjacent to the proposed hotel and office building.***

***Staff further recommends that the project commit to incorporating high-quality and unique design features and building architecture that will contribute to and enhance the proposed development's sense of place. Detailed renderings of the proposed buildings, as requested in the first referral, should also be provided for staff review. It would be appropriate to commit to architectural renderings or detailed design guidelines given that the project is within the Route 50 corridor. At a minimum, the project should commit to conforming to the Route 50 Corridor Design Guidelines dated January 4, 2007.***

***Lastly, staff recommends the following conditions:***

- enhanced buffering that includes existing trees where feasible will be provided adjacent to South Point Drive and the West Spine Road to help screen the adjacent parking areas;***
- screening of all mechanical equipment. Preferably, rooftop equipment should be incorporated into the roof form. Ground-mounted equipment and dumpsters should be screened by a fence or a wall of similar construction to the principle walls of the structure that the equipment serves; and***
- signage that provides a high level of design quality that is consistent with gateway design features.***

### **3. Existing Vegetation**

With the exception of the waterline easement along the southern boundary and the existing portion of the West Spine Road, the site is entirely forested with upland and lowland

hardwoods and pines (see the Forest Stand Delineation prepared by Angler Environmental, January 6, 2007). Thirty-four large trees, primarily oaks and hickories, with a dbh greater than 19 inches are present on the site. In the first referral, staff raised concerns that the application proposed complete removal of the existing, forested vegetation and recommended that the existing trees and tree stands be incorporated into the design of the site. Staff suggested several areas where this could be accomplished, including required perimeter buffers, public spaces (such as the plaza located between the hotel and retail/office building), leftover spaces, parking lot islands, etc. The Special Exception plat has been revised to designate two tree save areas on the site within the required Route 50 setback, consistent with landscaping requirements for Type 5 buffers along the roadway. According to the response to referral comments, additional tree save areas are not possible due to the grading that will occur on the site.



Looking south on the West Spine Road

***Although staff understands that the site's grading may make it difficult to preserve additional trees, staff remains concerned that the vast majority of the site's existing high-quality forest cover will be removed to accommodate the development of the project. Staff recommends that the Applicant explore ways to creatively incorporate additional trees into the project, for instance along the West Spine Road, within the pedestrian plaza between the hotel and the proposed office building, within the two largest parking lot islands, and within leftover spaces, particularly surrounding the proposed bank.***

***Staff also recommends that a condition of approval be drafted addressing tree maintenance and conservation within any designated tree save area.***

#### **4. Streams and Wetlands**

The application proposes the complete removal of the site's existing wetlands and streams. In the first referral, staff acknowledged that opportunities to preserve these features are limited given that the stream is impacted downstream by Gum Spring Village Center and the wetland is located where a roadway is planned. Staff recommended that the application commit to mitigating impacts within or close to the project area to help maintain water quality, flood protection functions, and habitat. According to the response to referral comments, the site layout now incorporates as much of the existing stream/wetland area on the west side of the West Spine Road as possible into the site's stormwater management system and that

the unavoidable impacts to wetlands or waters of the U.S. will be mitigated as consistently as possible with the Revised General Plan.

***Staff recommends that a condition of approval be developed requiring that all impacts to wetlands or waters of the U.S. be mitigated in close proximity to the development, consistent with Plan policies (Revised General Plan, Policy 23, pg. 5-11).***

#### **5. Stormwater Management**

In the first referral, staff requested additional information regarding the proposed stormwater management approach and recommended that low impact development (LID) techniques be integrated into the project given the amount of surface parking proposed. Staff also recommended a commitment that the proposed stormwater management facility be developed as a unique and attractive feature of the site. The Special Exception plat has been revised to provide additional details regarding the proposed stormwater management system, including the provision of extended detention areas and sediment forebays. The response to referral comments also indicates that "the Applicant will commit to providing landscaping with native vegetation around the naturally-shaped stormwater management pond. The Applicant anticipates that the stormwater management pond will become an aesthetically pleasing feature and an asset to the retail development that will allow the restaurant to construct an outdoor seating area to take advantage of its surroundings". However, the proposed site layout does not place the restaurant building adjacent to the stormwater management pond where a seating area would be possible; instead, a vehicular travelway and a row of parking spaces separates the two uses. In addition, the restaurant has been relocated to the southern portion of the site and is now closer to an extended detention area and a sediment forebay than the wet pond. Plan policies encourage freestanding restaurants to provide usable outdoor spaces (*Retail Plan*, Policy A.4, pg. 20).

***Staff defers to the Department of Building & Development to review the site's proposed stormwater management approach. Staff recommends a commitment that landscaping with native vegetation be provided around the stormwater management pond. Staff also encourages the proposed restaurant to provide a usable outdoor space.***

#### **6. Lighting**

In the first referral, staff recommended that the application commit to a reduced glare lighting plan. According to the response to referral comments, the Applicant will commit to a reduced glare lighting plan in accordance with Facilities Standards Manual (FSM) standards.

***Staff recommends that a condition of approval be developed limiting the intensity of lighting.***

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## RECOMMENDATIONS

Community Planning staff is not able to recommend approval of the Special Exception request at this time because the proposed development does not fully conform with Plan policies in terms of proposed use and design. While the portion of the site east of the West Spine Road is consistent with its Hybrid Retail Center planned land use designation, staff is particularly concerned that the portion within the planned Business areas does not meet the first criteria needed to justify increased retail in the Route 50 corridor and should be developed with more significant office uses. The design and layout of the site is also not consistent with the Plan's vision for compact and high-quality development within the Route 50 corridor. Staff also recommends that the Applicant coordinate future interparcel access with the property owner (Meadows Farms, Inc.) immediately east of the site. In addition to layout revisions, staff recommends that the project commit to incorporating high-quality and unique design features and building architecture that will contribute to and enhance the proposed development's sense of place.

In addition, staff recommends the following:

- Enhance pedestrian and bicycle connections, including the provision of bicycle racks;
- Incorporate more of the site's existing vegetation into the design of the site;
- Provide tree conservation and maintenance commitments;
- Commit to mitigating wetland and stream impacts close to the property;
- Commit to a reduced glare lighting plan;
- Commit to providing landscaping with native vegetation around the stormwater management pond;
- Provide enhanced landscaping to screen parking areas that are adjacent to roadways;
- Commit to screening mechanical equipment; and
- Commit to high-quality signage.

As always, staff would be happy to meet with the Applicant to discuss the issues raised in this referral.

cc: Julie Pastor, AICP, Planning Director  
Cynthia Keegan, AICP, Program Manager – via e-mail

**County of Loudoun**  
**Department of Planning**  
**MEMORANDUM**

**DATE:** November 26, 2007

**TO:** Stephen Gardner, Project Manager  
Land Use Review

**FROM:** Sarah Milin, Planner *sm*  
Community Planning

**SUBJECT: SPEX 2007-0029, West Spine Plaza**

**PROJECT DESCRIPTION**

DCI Construction Management, Inc. has submitted this Special Exception request to allow a bank with a drive-through, a gas station with a convenience store and car wash, a restaurant, and ground-floor retail within an office building on the subject property. The proposed Special Exception uses will accompany several permitted uses on the parcel, including a hotel with a restaurant and conference center, flex-industrial space, office, and warehouse uses. The property is currently zoned CLI (Commercial - Light Industry). Altogether, 161,903 sq ft of non-residential uses and six buildings are planned for the property, as follows:

**Summary of Proposed Uses by Building**

Building	Use	SPEX/Permitted	# Floors	Sq. Footage
#1	Hotel with accessory restaurant and conference center	Permitted	4 stories	61,378 sq ft
#2	Office / Ground Floor Retail	Permitted/SPEX	3 stories	54,000 sq ft
#3	Office / Flex Industrial / Warehouse Facility	Permitted	1 story	30,000 sq ft
#4	Bank with drive-through facilities	SPEX	1 story	4,500 sq ft
#5	Restaurant	SPEX	1 story	5,005 sq ft
#6	Gas station with convenience store and car wash	SPEX	1 story	7,020 sq ft
TOTAL				161,903 sq ft

Source: Special Exception Plat, 2/10/2007

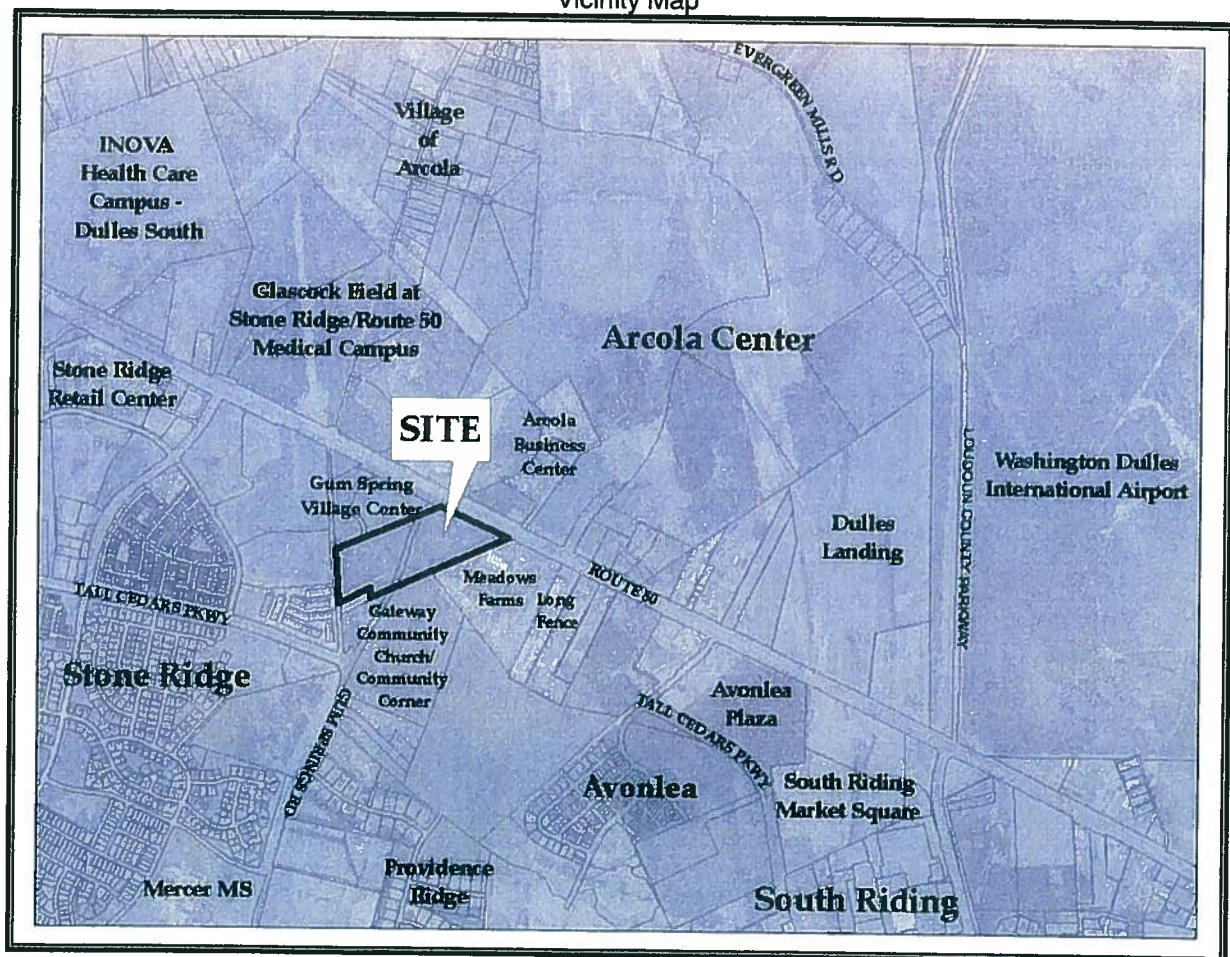
The subject property (MCPI 204-20-3829) consists of approximately 20.06 acres and is located on the south side of Route 50, just east of Gum Springs Road (Route 659) (*see Vicinity Map, pg. 2*). The planned West Spine Road will bisect the site in the future; two lanes of this roadway are currently built through the site. The subject property is surrounded by the following developments:

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- Gum Springs Village Center to the west (approved pursuant to SPEX 2003-0033 for 56,000 sq ft of retail uses; currently under construction);
- Gateway Community Church to the south (currently unbuilt);
- Community Corner also to the south (an active application for six commercial pad sites, including two banks with drive-thru facilities, a pharmacy with a drive-through facility, and two retail/office buildings; see ZMAP 2006-0024 & SPEX 2006-0037); and
- The existing Meadows Farms Nurseries and Long Fence immediately to the east.

Vicinity Map



The majority of the subject property is currently vacant and forested. The remains of a twentieth-century homestead first occupied between 1941 and 1943 were identified in the northwest corner of the site, adjacent to Gum Springs Road. A review of County GIS records indicates that several elements of the Countywide Green Infrastructure are present on the site, including existing vegetation, streams, and a wetland. The northern portion of the site is located within the Ldn 60 airport noise contour, with the remainder within the Ldn 60 1-mile buffer. An underground water easement runs along the southern boundary of the site. No floodplains or steep slopes are present.



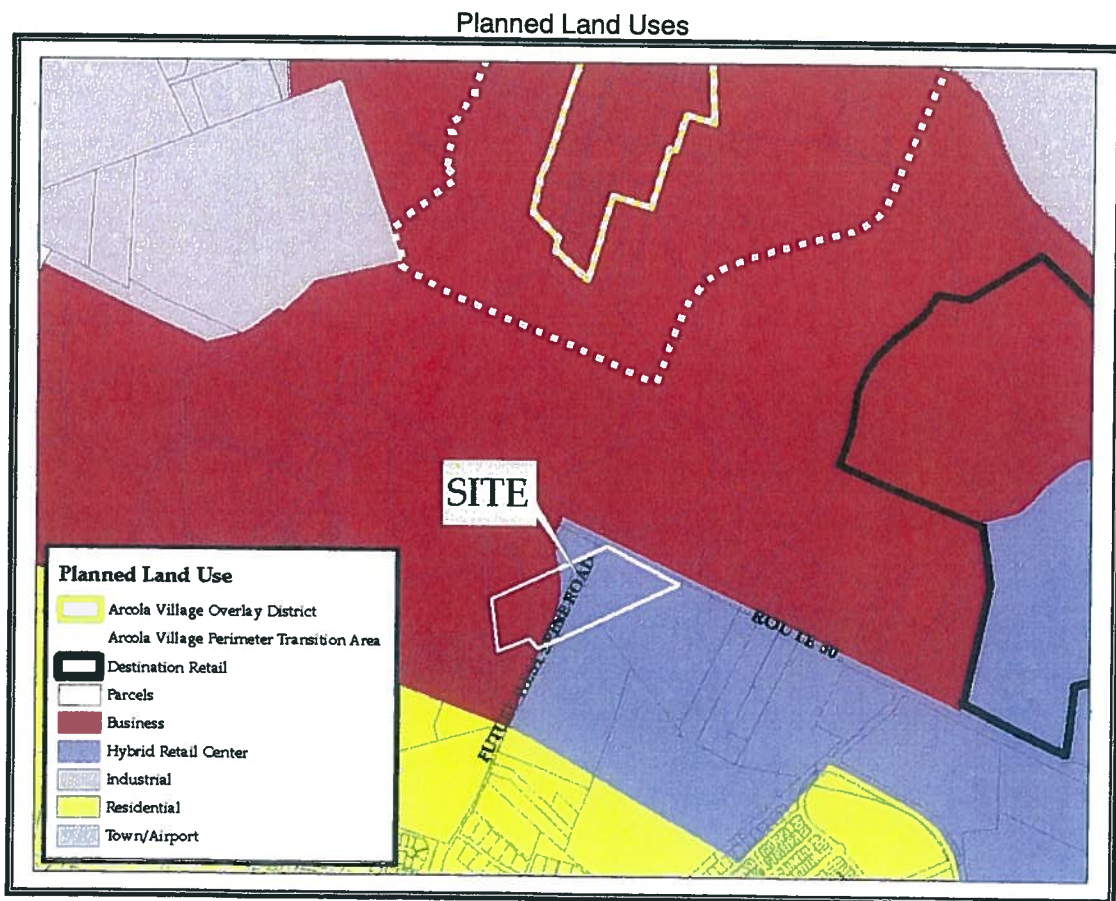
## COMPLIANCE WITH THE COMPREHENSIVE PLAN

Guidance for development of the subject property is provided by the Revised General Plan, as amended by the Arcola Area/Route 50 Corridor Plan. The Revised Countywide Transportation Plan, the Countywide Retail Plan Amendment ('Retail Plan') and the Bicycle and Pedestrian Mobility Master Plan ('Bike/Ped Plan') also apply. The site is located in the Dulles Community of the Suburban Policy Area. The Revised General Plan designates the site as suitable for Business Community and Hybrid Retail Center uses (*Arcola Area/Route 50 Corridor Plan, Planned Land Use Map*).

## ANALYSIS

### 1. LAND USE

The future alignment of the West Spine Road forms a physical boundary between the two land uses on the subject property, with business uses recommended to the west and hybrid retail uses recommended to the east. The type of development anticipated with these two land uses is discussed in greater detail below. The West Spine Road (Route 606) is identified in the Countywide Transportation Plan (CTP) as a four-lane, median divided roadway in a 120-foot right-of-way.



**a. Business Community**

The Arcola Area/Route 50 Corridor Plan states that areas designated Business in the Route 50 Corridor shall be subject to the policies and land use mix ratios of Chapter 6 except as modified or supplemented by the Corridor Plan (*Arcola Area/Route 50 Corridor Plan, Policy 1, pg. 5*). The Revised General Plan calls for planned Business areas to develop as either a Regional Office or a Light Industrial development. Such developments can include a mix of land uses, including commercial retail and services, but regional office uses should constitute the majority of the land area (Revised General Plan, text, pg. 6-28 and 6-29). In the Route 50 corridor, in order to address the deficit of retail uses and the potential for tourism in this area, the County can consider retail/commercial service uses that exceed the 10 percent maximum set out for Business Communities in Chapter 6 as long as the following criteria are met:

- 1) The retail use provides the goods and services needed by local employment and residential communities and/or supports the development of tourism in the Route 50 corridor;
- 2) The retail use is compatible with and can illustrate a coordinated design, transportation connection or other relationship with the surrounding communities that exist or have been approved;
- 3) The retail use does not access Route 50 directly;
- 4) The proposal provides adequate and appropriate transportation infrastructure; and
- 5) The proposal conforms to policies in the Retail Plan (*Arcola Area/Route 50 Corridor Plan, Policy 2, pg. 5*).

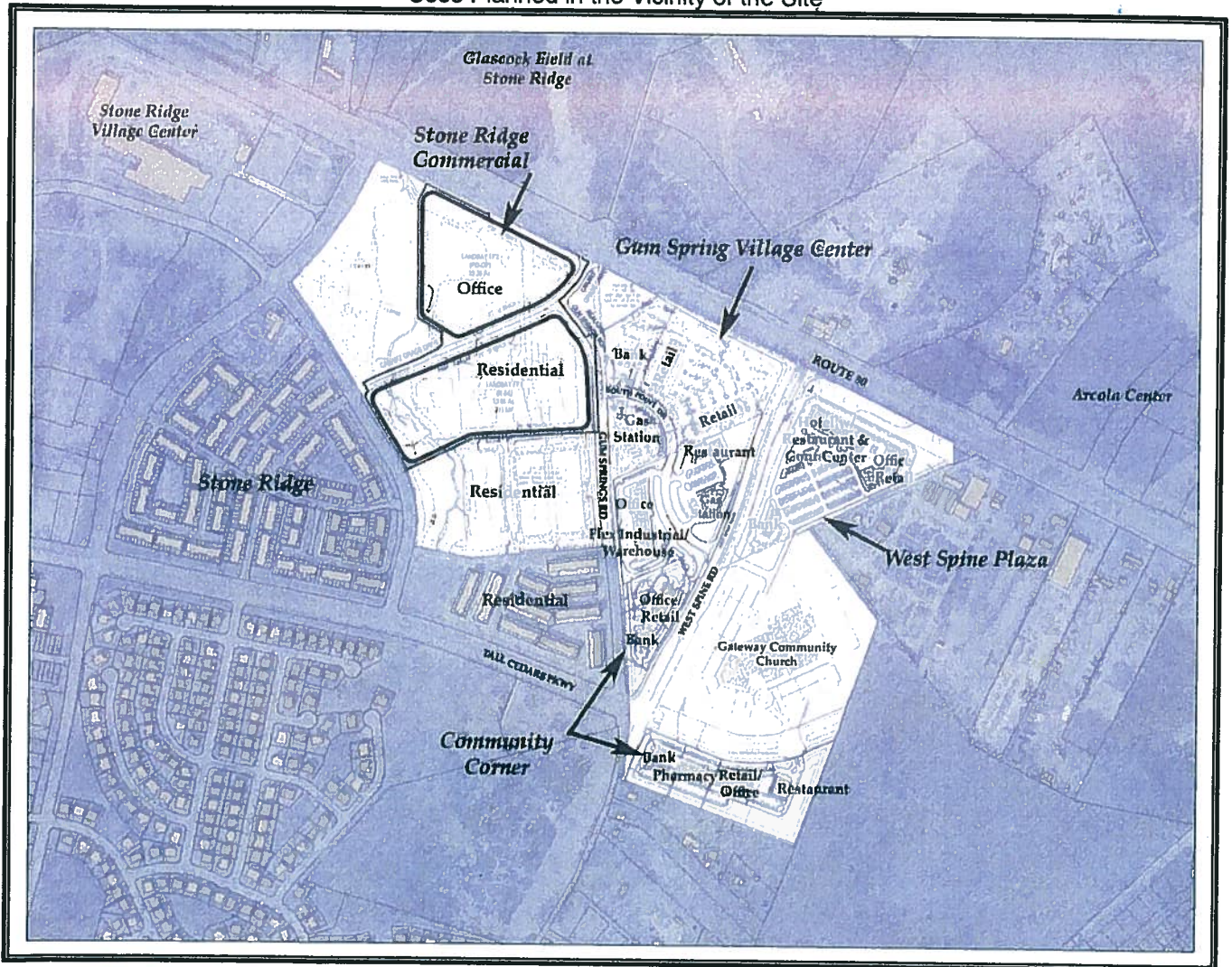
Within the portion of the site planned for Business uses, the application proposes a permitted office/flex industrial warehouse facility and the following Special Exceptions uses: a restaurant and a gas station with a convenience store and a car wash. The proposed land use mix is dominated by commercial retail and service uses and is not consistent with the land use mix for a business community. The project should therefore meet the criteria outlined above. In this case, the project clearly meets three of the five criteria. The proposed retail uses will be compatible with adjacent developments, including Gum Spring Village to the west and Gateway Community Church and Community Corner to the south; no direct access onto Route 50 is proposed; and planned roadway improvements include the construction of the West Spine Road through the site. However, additional information and changes to the project are needed so that the project will fully comply with the following two criteria:

Criteria #1: *The retail use provides the goods and services needed by local employment and residential communities and/or supports the development of tourism in the Route 50 corridor.* The Retail Plan states that all applications for commercial retail rezonings must include a statement describing the catchment or market area to be served as well as a statement of justification that contains an analysis of existing and proposed competing projects (*Retail Plan, Policy 4, p. 6*). The application includes market studies for only the proposed uses for which the applicant has no committed users, namely the hotel, office space, and flex space;



market studies have not been provided for the proposed retail uses. As such, it is not clear whether the local employment and residential communities need these services given that the same uses have already been approved in this area, as shown in the graphic below. If these services are not needed, then the application should demonstrate how the project will support the development of tourism in the Route 50 corridor to meet the first criteria.

Uses Planned in the Vicinity of the Site



Staff notes that this intersection may in the future become desirable for larger-scaled office development due to its location at the intersection of two major roadways (Route 50 and the West Spine Road), where a grade-separated interchange is planned. Overall, the developments planned and proposed southwest of the Route 50/West Spine Road intersection do not advance the Plan's vision for a Business Community at this location; rather than having significant office development, the predominant land use appears to be strip commercial development. Although the applicant proposes some office within the



planned Business area, it is not significant (only 10,000 sq ft) and is part of a 1-story building containing flex industrial/warehouse uses. If the applicant cannot adequately demonstrate that the proposed retail uses are needed by the surrounding residential and employment community or supportive of tourism, then it may be appropriate to retain this section of the property for more significant office development.

*Criteria #2: The retail use is compatible with and can illustrate a coordinated design, transportation connection or other relationship with the surrounding communities that exist or have been approved.*

Although the applicant states as justification for the proposed application that goods and services will be provided that are supportive of the growing residential population in this area, no pedestrian linkages are proposed along South Point Drive or the West Spine Road. The future West Spine Road is identified in the Bike/Ped Plan as a baseline connecting roadway and envisions such roadways with off-road, shared use paths. Shared use paths should be designed to accommodate both pedestrian and bicycle traffic and should include connections to activity centers both within a development and on adjacent properties. Shared use paths should maintain a minimum width of ten feet. Staff notes that Gum Springs Village Center (SPEX 2003-0033) committed to providing sidewalks on both sides of South Point Drive and Community Corner (ZMAP 2006-0024 & SPEX 2006-0037) committed to a 10-foot wide, asphalt shared use path along West Spine Road. To ensure that the developing trail network is not compromised, this project should provide similar linkages and bicycle racks.

***The project, as currently proposed, does not meet all the criteria needed to justify additional retail in the planned Business area west of the West Spine Road. Specifically, information regarding the market area of the proposed gas station and restaurant should be provided so that staff can determine whether a need for such uses exist and will not be fulfilled by the other projects planned in the vicinity of the site. This analysis should not only consider competing retail projects that have already been developed, but also those that have been proposed and/or approved. Such information will also allow staff to determine if the proposed uses will support the development of tourism in the Route 50 corridor.***

***Staff also recommends that adequate pedestrian travelways be provided, specifically sidewalks on both sides of South Point Drive and 10-foot wide shared use paths on both sides of the West Spine Road. Bicycle racks should also be provided.***

#### **b. Hybrid Retail Center**

Hybrid Retail Centers provide for convenience and routine shopping needs and can also incorporate some larger-scale retailers that are typically characterized as Destination Retail. Other types of uses, such as office, light industrial, and civic uses, are anticipated to develop in this area (*Arcola Area/Route 50 Corridor Plan, Policy 1, pg. 6*). Strip retail development is discouraged in the Route 50 corridor; rather, the County encourages the consolidation of CLI

properties to encourage coordinated development with minimal access points (*Arcola Area/Route 50 Corridor Plan, Policy 4, pg. 7*).

Within the portion of the site planned for Hybrid Retail Center uses, the application proposes a permitted 4-story hotel with an accessory restaurant and conference center, a 3-story office building with ground-floor retail, and the following Special Exceptions uses: a bank with a drive-through and 18,000 sq ft of retail on the first floor of the office building. The proposed Special Exception uses are the types of retail uses that are anticipated to develop in the Hybrid Retail Center area. However, future interparcel connections to the east should be considered. The parcel immediately adjacent to the site belongs to Meadows Farms Inc. and contains greenhouses, warehouses, open storage areas, and an office building.

***Staff finds that the proposed Special Exception uses east of the West Spine Road are consistent with its Hybrid Retail Center designation. However, staff recommends that the applicant coordinate interparcel access with the property owner immediately east of the site.***

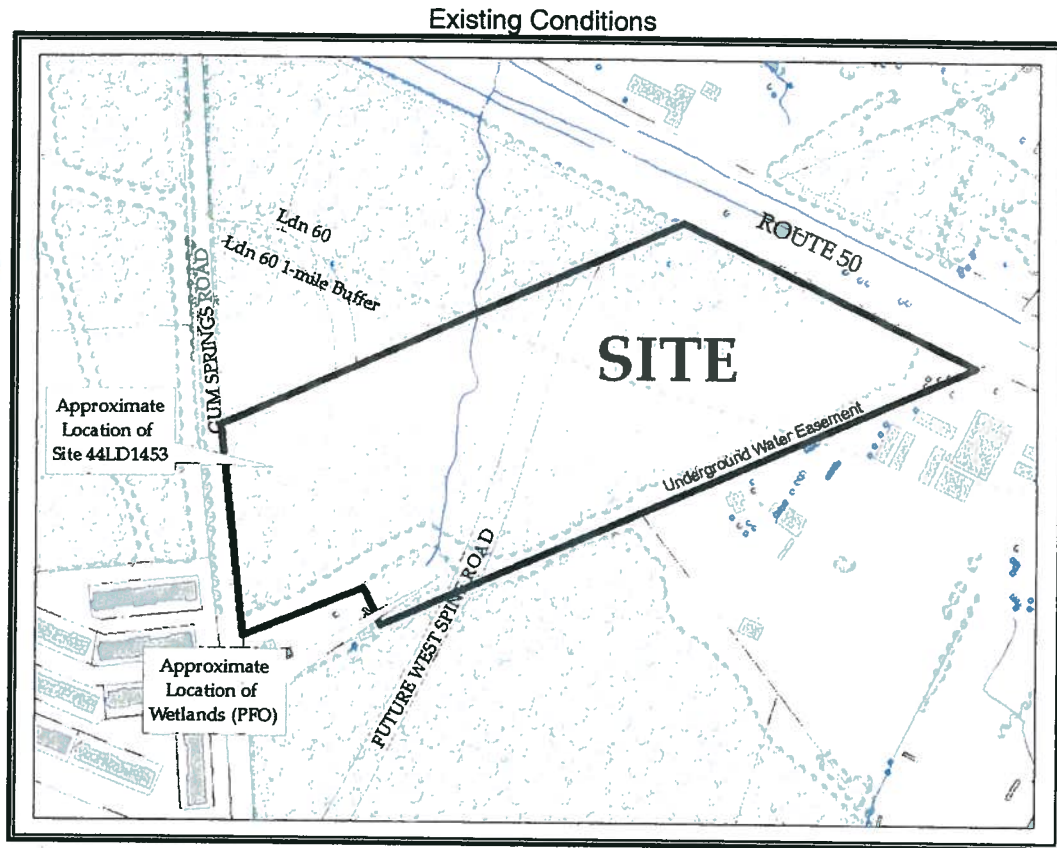
## **2. EXISTING CONDITIONS**

The Plan defines the County's Green Infrastructure as a "collection of natural, cultural, heritage, environmental, protected, passive, and active resources that will be integrated in a related system" (*Revised General Plan, Policy 1, pg. 5-1*). As shown below, on-site environmental resources include forest cover, streams, wetlands, diabase soils, and historic resources. The site is also impacted by the Ldn 60 and the Ldn 60 1-mile buffer airport noise contours. An underground water easement runs along the southern boundary of the site.

The project does not propose to preserve any of the site's existing features. However, staff notes that a total of 703 parking spaces are proposed for the site, 65 more than required by the Zoning Ordinance. The County discourages developments to provide more parking spaces than are required by the Zoning Ordinance in order to minimize the creation of unnecessary or seldom used impervious surfaces (*Revised General Plan, Policy 1, p. 6-30*). The total impervious area on the subject site could be reduced by approximately 10,530 sq ft<sup>1</sup>, or 0.24 acres, if only the required number of parking spaces is provided. This area could instead be used to preserve some of the site's environmental features, for example by incorporating tree save areas or low impact development (LID) measures within the project.

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<sup>1</sup> A typical parking space measures approximately 9 by 18 feet, or 162 sq ft per space. 65 parking spaces x 162 sq ft = 10,530 sq ft.



Note: Diabase soils are not shown on this graphic as the entire area is underlined with diabase.

**a. Existing Vegetation**

Existing natural features such as hedgerows, mature trees, and berms should be integrated into the landscape plan for retail centers, when feasible (*Retail Plan, Policy C.3, pg. 21*). The Arcola Area/Route 50 Corridor Plan also emphasizes the protection of mature vegetation and encourages the use of features such as floodplains and hedgerows to buffer and separate different uses (*Arcola Area/Route 50 Corridor Plan, Policy 2d, pg. 8*). Plan policies also call for the submittal and approval of a tree conservation or forest management plan prior to any land development that “demonstrates a management strategy that ensures the long-term sustainability of any designated tree save area” (*Revised General Plan, Policy 3, pg. 5-32*).

With the exception of the waterline easement along the southern boundary and the existing portion of the West Spine Road, the site is entirely forested. The application includes a Forest Stand Delineation prepared by Angler Environmental (dated January 6, 2007) which describes and maps the five forest community types that were found on the property. Thirty-four large trees (oaks and hickories) with a dbh greater than 19 inches were also identified. Although the property contains forest stands and individual trees that are worthy of protection, it appears as though the site will be completely cleared for development.



***Staff recommends that the application preserve and incorporate existing trees and tree stands into the proposed development by delineating specific Tree Conservation Areas (TCAs) on the Special Exception plat. Logical locations for preservation include within the required perimeter buffers, public spaces (such as the plaza located between the hotel and retail/office building), parking lot islands, etc. To fully assess the site's potential to retain the significant trees identified in the tree survey, staff recommends that an exhibit be prepared which overlays the proposed development layout over the tree cover survey.***

**b. Streams and Wetlands**

Plan policies encourage the preservation of both streams and wetlands (Revised General Plan, Policy 11, pg. 5-9 and Policy 23, pg. 5-11). Two drainage swales bisect the subject property. The south to north stream contains a headwater wetland drainage, identified as a palustrine forested wetland (PFO), in the southwest corner of the site within the West Spine Road reservation area. This delineation has been confirmed by the U.S. Army Corps of Engineers. The proposed development will completely impact both the streams and the wetland area. However, opportunities to preserve these features are limited given that the stream is impacted downstream by Gum Spring Village Center and the wetland is located where a roadway is planned.

***Staff recommends that the application commit to mitigating impacts within or close to the project area to help maintain water quality, flood protection functions, and habitat.***

**c. Stormwater Management**

The County encourages new developments to incorporate low impact development (LID) techniques (Revised General Plan, Policy 2, pg. 5-17). One stormwater management pond has been identified on the Special Exception plat on the existing stream, adjacent to the proposed restaurant west of the future West Spine Road.

***Staff recommends confirmation that the proposed management pond will be sufficient to treat the entire site's stormwater. Staff also recommends that site's stormwater management approach integrate low impact development (LID) techniques given the amount of surface parking proposed, such as planting vegetation in buffer strips and/or rain gardens adjacent to roadways and within parking areas or open space areas.***

***The application should also commit to developing the proposed stormwater management facility as unique and attractive features of the site in order to enhance the character of the proposed project. For instance, a naturally-shaped stormwater management pond heavily landscaped with native vegetation and accented by an adjacent outdoor sitting area could be a nice feature for the adjacent restaurant.***

**d. Historic Resources**

Plan policies state that the County will require an archeological and historic resources survey as part of all development applications (Revised General Plan, Policy 11, pg. 5-36). The application includes a Phase 1 archaeological survey for the property which identified the remnants of a twentieth-century farmstead first occupied between 1941 and 1943. The survey concluded that the site has little potential to contribute important information on the history of the area and recommended no further work. Staff's review of the submitted report will be sent under separate cover.

**e. Lighting**

The Plan states that "the beauty of the County's night sky is threatened by excessive and improper lighting" (Revised General Plan, text, pg. 5-31). The Retail Plan also specifies that all lighting should be designed to reduce glare and spillage of light onto adjoining properties and streets (Retail Plan, Policy D2, pg. 21). No information regarding lighting has been provided.

***Staff recommends that the application commit to a reduced glare lighting plan.***

**3. SITE DESIGN AND LAYOUT**

Overall, the Revised General Plan calls for new development in the County to achieve and sustain a built environment of high quality (Revised General Plan, Policy 1, pg. 5-5). The Arcola Area/Route 50 Corridor Plan and the Retail Plan provide a number of design guidelines that are intended to create an attractive gateway to Loudoun County. In addition, the Route 50 Corridor Design Guidelines provide a set of recommendations that illustrate the type of development that is desired within the corridor.

**a. Building/Parking Placement**

Plan policies discourage strip development of any type (Retail Plan, Policy 6, p. 6 and Revised General Plan, Policy 11, p. 6-7). In general, retail developments should be designed compactly so as to create vibrant, pedestrian-oriented development that promotes community interaction and preserves open space for other uses (such as landscape buffers, civic spaces, trails, etc). Buildings should be the predominant feature of the development when viewed from adjoining roadways (Retail Plan, Policy C.1, pg. 20). Thus, the placement of large parking lots at the street edge should be generally avoided. When unavoidable, parking areas should be visually screened from adjacent streets and residential areas by heavy landscaping, depressing the parking area, and/or constructing earthen berms (Retail Plan, Policy B.3, pg. 21).

The proposed development is similar to a strip commercial development in that it proposes several standalone buildings and retail pad sites (for the restaurant, the bank, and the gas station) that are surrounded, and separated from one another, by surface parking areas. Parking areas will be visible from both South Point Drive and the West Spine Road.

Although the gas station needs to be separated from the other uses, opportunities exist for both the bank and the restaurant to be relocated.

***Staff recommends that the proposed restaurant be relocated closer to South Point Drive in order to frame the street, unless it can be demonstrated that its current location (adjacent to the stormwater management pond) will provide more benefits. This could be accomplished by committing to landscaping the pond and placing a sitting/eating area adjacent to it. Staff also recommends that the proposed drive-through bank be relocated northward so that it has a stronger relationship with the other buildings (the hotel, conference center, and office building) proposed east of the West Spine Road. Lastly, enhanced landscaping should be provided wherever parking areas are proposed adjacent to South Point Drive and the West Spine Road. The enhanced landscaping should include existing trees, as feasible.***

**b. Architectural Design of Buildings**

Facades of retail buildings should be articulated with distinct architectural details, recesses, off-sets, angular forms or other such features to contribute to the design character of an area (*Retail Plan, Policy A.6, pg. 20 and Route 50 Corridor Design Guidelines, pg. 40*). For instance, facades that change materials (e.g., brick, stone, etc) or incorporate a continuous water table, pilasters, or cornice can reinforce scale and provide visual interest. Buildings within a multi-building retail center should exhibit a unit of design through the use of similar features such as rooflines, materials, window arrangement, sign location and architectural details (*Retail Plan, Policy A.3, pg. 20*). Distinctive roof forms are encouraged (*Retail Plan, Policy A.7, pg. 20*). Gas canopies should use forms, colors and materials that complement the adjacent building design (*Route 50 Corridor Design Guidelines, pg. 29*). No information regarding the proposed architecture of the buildings has been provided.

***Staff recommends information or renderings of the proposed architectural design of the buildings so that staff can assess compliance with Plan policies. Staff also recommends commitments that will ensure that all the buildings will be unified and exhibit a high quality of design and materials, as envisioned in the Route 50 corridor.***

**c. Usable Outdoor Spaces**

Freestanding restaurants are encouraged to provide usable outdoor spaces (*Retail Plan, Policy A.4, pg. 20*). The Special Exception plat indicates that a plaza is proposed between the hotel and three-story office building. No outdoor space is proposed west of the West Spine Road where the restaurant, gas station, and office/flex industrial warehouse facilities are proposed.

***Staff encourages the Applicant to consider providing a usable outdoor space adjacent to the stormwater management pond to serve the proposed restaurant. If such as***



***space is not provided, as mentioned above, then staff recommends that the building be shifted westward so that it is adjacent to South Point Drive.***

**d. Screening of Mechanical Equipment**

All rooftop and ground-mounted mechanical equipment should be screened (*Retail Plan, Policy A.8, pg. 20*).

***Staff recommends a condition that all mechanical equipment will be screened. Preferably, rooftop equipment should be incorporated into the roof form. Ground-mounted equipment and dumpsters should be screened by a fence or a wall of similar construction to the principle walls of the structure that the equipment serves.***

**e. Signage**

The Plan calls for signs for retail centers to be “developed as an integral part of the overall center design. A unified graphic design scheme is strongly encouraged” (*Retail Plan, Policy D1, p. 21*). Designers should seek to limit the use of signs as well as reduce the size of signs and other features that may create negative visual impacts on the surrounding community and Route 50 (*Revised General Plan, text, pp. 6-20*).

Signage along Route 50 as a southern gateway, like the buildings themselves, is used to communicate the County’s image and identity. Signage should generally exhibit a high quality of design and materials that complement the proposed buildings. Signage is usually limited to free-standing monuments and wall-mounted signs. If signs are well presented and coordinated, the image of the business or commercial center as well as the individual tenants is enhanced. The signage in conjunction with landscaping and buildings all contribute to the visual quality that defines a gateway into the County. The only signage shown on the proposed Concept Development Plan (CDP) is a proposed monument sign at the site’s eastern entrance off of the West Spine Road. No other information is provided regarding the size and materials of the monument signs. Staff is unsure what other type of signage is planned for the proposed development.

***Staff requests information pertaining to the size and location of signage. The proposal should include a unified design consistent with gateway design features, which call for a high level of design quality and minimal use of signs along Route 50.***

**RECOMMENDATIONS**

Community Planning staff is not able to recommend approval of the Special Exception request at this time because the proposed development does not fully conform with Plan policies in terms of proposed use and design. Specifically, staff recommends the following:

- Provide a market analysis for the proposed gas station and restaurant;
- Provide sidewalks along South Point Drive and a 10-foot shared use path along the West Spine Road;
- Provide bicycle racks;

- Consider providing an interparcel access point to the parcel to the east;
- Incorporate existing vegetation into the design of the site;
- Commit to mitigating wetland and stream impacts close to the property;
- Incorporate low impact development (LID) techniques;
- Commit to a reduced glare lighting plan;
- Relocate the restaurant closer to South Point Drive, unless the stormwater management pond is enhanced to provide benefits for its current location;
- Relocate the drive-through bank northward;
- Provide enhanced landscaping to screen parking areas that are adjacent to roadways;
- Providing information and commitments regarding the architectural design of the buildings;
- Commit to screening mechanical equipment; and
- Provide information regarding signage.

As always, staff would be happy to meet with the applicant to discuss the issues raised in this referral.

cc: Julie Pastor, AICP, Planning Director  
Cynthia Keegan, AICP, Program Manager

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**COUNTY OF LOUDOUN**  
**DEPARTMENT OF BUILDING AND DEVELOPMENT**  
**ZONING ADMINISTRATION THIRD REFERRAL**

**DATE:** February 5, 2009

**TO:** Stephen Gardner, Project Manager, Planning Department

**FROM:** Cindy Lintz, Planner, Zoning Administration

**THROUGH:** Marilee L. Seigfried, Deputy Zoning Administrator

**CASE NUMBER AND NAME:** SPEX-2007-0029 West Spine Plaza

**TAX MAP/ PARCEL  
NUMBER (MCPI):** 101////////41/ 204-20-3829

The Zoning Administration has reviewed the third submission of the above referenced application and has the following comments.

**I. Zoning Administration Comments**

1. The Statement of Justification, page 1, the second sentence "In addition to the proposed special exception uses..." should be removed.
2. Sheet 1, Note #1, remove the by-right uses.
3. Sheet 1, Note #1, if a convenient store is being proposed for building "F," then in the proposed uses on Sheet 1, "Convenient food store without gas pump" should be included.
4. Sheet 1, under Area Tabulations, the landscape open space provided should be updated. If the buildable area is 539,250, then  $131,705/539,250 = 0.24$ .
5. Sheet 2, label the reservation area shown on Sheet 1.
6. Sheet 2, 2A, 4 and 4A, the signs shown on the plat require a separate sign permit. Therefore, the signs shown on the plats do not guarantee this type of sign or the sign location if this application is approved.
7. Sheet 2, 2A, 4 and 4A, as stated in the previous set of comments, it appears that the 8' proposed asphalt trail is included in the future abandoned area of old Route 659. It is premature to include the trail in the abandoned area.
8. Sheet 2A, the Special Exception area should include access to the use and parking. The drive way to the bank and building F should be included in the Special Exception Uses (hatch mark) up to the easement.
9. Sheet 3, please remove the note of a Type 2 landscape buffer on Existing Conditions sheet.
10. Sheet 4, please clarify the tree save area. It appears to include more than just an enhancement.
11. Update Community Corner (PIN 204-10-2931) to CLI/ PD-CC-CC. Community Corner has both PD-CC-CC and CLI on the parcel. Also update Community Corner (PIN: 204-19-8672), The R-1 zone no longer exists on those parcels. Please revise all sheets.
12. Please include the square footage of the deck on building "C" – restaurant for all applicable sheets.

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**COUNTY OF LOUDOUN**  
**DEPARTMENT OF BUILDING AND DEVELOPMENT**  
**ZONING ADMINISTRATION SECOND REFERRAL**

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**DATE:** August 20, 2008

**TO:** Stephen Gardner, Project Manager, Planning Department

**FROM:** *cl*  
Cindy Lintz, Planner, Zoning Administration  
William Marsh, Environmental Review Lead Team Leader

**THROUGH:** Marilee L. Seigfried, Deputy Zoning Administrator

**CASE NUMBER AND NAME:** SPEX-2007-0029 West Spine Plaza

**TAX MAP/ PARCEL  
NUMBER (MCPI):** 101////////41/ 204-20-3829

The Zoning Administration has reviewed the second submission of the above referenced application and has the following comments.

**I. Zoning Administration Comments**

1. With a Special Exception application, Zoning Administration is only addressing the Special Exception uses. It is premature to review by-right uses and to make comments relating to by-right uses, they will be addressed at the time of Site Plan.
2. In the Statement of Justification, first page, please include that "The Property abuts land zoned R-16, R-24 to the west and PD-CC-CC to the South.
3. Sheet 1 of the plat with note #3 and Area Tabulation, County Records show 20.06 acres, whereas the survey of the site shows 21.34. This is over an acre discrepancy. Does the survey include the future abandonment of old 659? Please explain the large discrepancy.
4. Sheet 1, note #6 of the plat, the building height ratio is 45 feet with a setback of 1 additional foot for each additional 1 foot of building height – not 5 additional feet. Please correct.
5. Sheet 1, please remove note #19.
6. Sheet 1, the "Area of Right of Way dedication" says dedication, however, on Sheet 2, West Spine Road says Reservation. Please correct this discrepancy.
7. Sheet 1, under Area Tabulations, the provided landscape open space should be 0.29 not 0.18. ( $165,452/573,992.6 = 0.29$ ).
8. Sheet 2, there is far too much detail on this sheet, it is premature to include this much detail, which will be reviewed at site plan. Please remove buffer for by-right uses, sign locations, and parking count details from the plan. Include a note that these items will be in conformance with the zoning ordinance at the time of site plan review.
9. Sheet 2 is labeled "Concept Development Plan." Please change this to a Special Exception Plat.
10. Sheet 2, it appears that the asphalt trail is included in the future abandoned area of old Route



659. It is not clear when this road will be abandoned, so it is premature to include the trail in the abandoned area. The applicant may want to show a trail easement along old Route 659.
11. Sheet 2, Gateway Community Corner is not apart of this Special Exception application. Staff recommends removing that information.
  12. Sheet 2, please update Community Corner (Pin 204-19-8672) to PD-CC-CC.
  13. Sheet 2, please update Community Corner (Pin 204-10-2931) to CLI.
  14. Sheet 2 building "D", the word restaurant has a misspelling.
  15. Sheet 2, if the restaurant is planning to have outdoor seating, please show this on the plat.
  16. Sheet 2, Building F, please change the use to "Retail Sales Establishment" to meet CLI Special Exception use.
  17. Sheet 2, if the application is planning to keep by-right uses labeled on the plat, please include the by-right use for building "F."
  18. Sheet 2, please label dedication of right-of-way for the future Route 659/ Route 50 interchange on the plat. The setbacks from the ultimate road condition will be reviewed at site plan.
  19. Sheet 2, since the inter-parcel access easement is going through Gateway Community Church, then they should be an applicant on this application.
  20. Sheet 2, the Special Exception area should include accessory uses including access to the use and parking.
  21. Sheet 4, landscape plan will be reviewed at site plan.

## II. Environmental Review Team Comments

The Environmental Review Team (ERT) has comments pertaining to the current application, as follows:

1. Protecting surface water quality is an important issue for consideration, as required by Section 6-1310(H) of the Revised 1993 Zoning Ordinance. The Stormwater and Best Management Practice (BMP) approach remains an outstanding issue for the following reasons:

- Comprehensive stormwater and BMP coverage for impervious surfaces on this site is still uncertain, because the proposed pond location may not be located to capture runoff from areas near the proposed hotel.
- The "extended enhanced" BMP depicted in plan view achieves a 50-percent phosphorous removal efficiency when properly designed but may not be sufficient by itself to treat the pollutants from a site with a high impervious ratio.
- The applicant's stated interest in low impact development is not demonstrated with the design indicated on the special exception plat. As described in Section 5.200 of the Facilities Standards Manual (FSM), LID "seeks to minimize the impact of development on watershed characteristics by reducing impervious areas and creating opportunities for groundwater recharge, evaporation, and vegetation absorption in an effort to mimic the predevelopment hydrologic conditions." An approach only using dry ponds with forebays will not allow any infiltration, because ponds are designed with impervious embankments and bottoms, as described in Chapter 3 of the Virginia Stormwater Management Handbook. The large loss of forest habitat minimizes potential for evaporation and vegetative absorption. The loss of wetland areas also hinders

groundwater recharge.

Staff suggests a meeting with the applicant to address this issue. Several buffer areas near roads and large parking lot islands may provide good opportunities for bioretention basins, where such basins can use underdrains connected to a pipe network if existing soils do not allow for rapid infiltration. Native vegetation required within these basins can also enhance proposed buffers and require little if any irrigation. Including several bioretention basins is more consistent with the applicant's stated interest in low impact design and need not drastically alter the site layout.

2. In the first referral, staff encouraged application of green building standards with this application, including consideration of Leadership in Energy and Environmental Design (LEED). The applicant stated a general interest in green building traits but made no specific commitments. Staff encourages further discussion with the applicant to ascertain the degree of commitment to LEED traits and to make available to the applicant LEED Accredited Professional staff. If commitments to verifiable LEED traits are not pursued, please elaborate further on how the Revised General Plan (RGP) policies specified previously are achieved with this application.

3. Staff appreciates including a tree save area near Route 50. Staff recommends a condition of approval for tree conservation to conserve and maintain this resource.

4. For any unavoidable impacts to wetlands or waters of the U.S., mitigation should occur in close proximity to the development, consistent with Policy 23 in Chapter 5, page 5-11, of the RGP. Accordingly, staff recommends the following condition of approval for wetland and Waters of the US mitigation as follows: 1) within the Broad Run Watershed within the same Loudoun County geographic Policy Area, 2) within the Broad Run Watershed within another Loudoun County geographic Policy Area, or 3) elsewhere within Loudoun County, subject to approval by the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality.

5. For reference, please also include the jurisdictional determination (JD) number for this project: JD #06-B0212 (Saraswati Property) issued on February 9, 2007.

6. Staff appreciates the applicant's willingness to provide digital data of stream and wetland sources on site and recommends a condition of approval for providing this data during the site plan review.

Due to the scope of the comments provided, staff requests an opportunity to review the subsequent submission of this application. Please contact me if you need any additional information.

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**COUNTY OF LOUDOUN**  
**DEPARTMENT OF BUILDING AND DEVELOPMENT**  
**ZONING ADMINISTRATION REFERRAL**

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**DATE:** December 4, 2007

**TO:** Stephen Gardner, Project Manager, Planning Department  
*Cl*

**FROM:** Cindy Lintz, Planner, Zoning Administration

**THROUGH:** Marilee L. Seigfried, Deputy Zoning Administrator *mls*

**CASE NUMBER AND NAME:** SPEX-2007-0029 West Spine Plaza

**TAX MAP/ PARCEL  
NUMBER (MCPI):** 101////////41/ 204-20-3829

**I. APPLICATION SUMMARY**

The applicant, DCI Construction Management, Inc., is requesting special exception approval to develop a bank with drive through, a car wash, a convenience store with gas pumps, one restaurant and a retail sales establishment on a parcel located within the CLI (Commercial Light Industry) zoning district under the Revised 1993 Loudoun County Zoning Ordinance ("Ordinance"). The 20.06 acre parcel is located within the Airport Impact Overlay District.

Zoning Administration staff has reviewed the following items as part of the 1st submission of the above-referenced special exception application:

- A. Information Sheet (w/ Easement agreement, VDHR memo dated 11/30/04, VDCR memo dated 12/2/04))
- B. Statement of Justification dated January 25, 2007
- C. Phase I Cultural Resources Investigation dated January 25, 2007
- D. Tree Stand Delineation dated January 6, 2007
- E. Wetland Determination dated December 2007
- F. Fiscal Impact Analysis dated March 1, 2007 (OTS, VDOT, PM, & File)
- G. Special Exception Plat dated February 10, 2007 revised through July 27, 2007

The following issues have been identified and must be addressed in order for the application to be in conformance with the Ordinance:

**II. CONFORMANCE WITH THE REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE**

1. With the inter-parcel access the uses west of West Spine must be permitted on both parcels.



Gateway Community Church is currently CLI, but has a rezoning application to PD-CC-CC. The by-right flex Warehouse use is not allowed PC-CC-CC.

2. The proposed Special Exceptions, bank with drive through and retail establishment, are by Special Exception. The inter-parcel access through Gateway Community Church, zoned CLI, does not have those uses as permitted uses by Special Exception. Therefore, those uses are not allowed unless a different access point is located.
3. The existing Gum Springs Road cannot be included as part of the yard. Please provide a 100' building setback and a 75' parking yard for a Minor Arterial and remove the parking located within the yard.
4. Pursuant to Section 5-659, the drive through bank needs an escape lane.
5. Per Section 3-907(H) provide pedestrian access within the parcel.

### III. ADDITIONAL COMMENTS

1. In the Statement of Justification on page 2, the restaurant is 3,191sq.ft. The plat shows 5,005sq.ft. Please correct the discrepancy.
2. According to County records the parcel has 20.06 acres/ 873,813.6 sq.ft. Please use this to calculate the FAR and Open Space. Page 3 of the Statement of Justification needs to be updated.
3. Sheet One of the plat, the yards adjacent to roads needs to be updated (35' building, 25' parking), along with the building height (45') to reflect the amendments to the Revised 1993 Zoning Ordinance.
4. Note #18 on Sheet One needs to include a note in conformance with canopy coverage per Section 5-1300. A note needs to be provided stating parking will be in conformance with Section 5-1100.
5. On Sheet One, what is the "Proposed lot area" and why is it different from the "Total Site Area?"
6. On Sheet Two, change the restaurant parking to 15 per 1000 to reflect the amended Ordinance.
7. On Sheet Two, please measure the 35' line along West Spine Road (both sides). The 35' yard line is not to scale on the south side of the unmarked road. Please show the 25' parking yard.
8. Please label all roads.
9. Please label the car wash. A "Detail Bay" is not a use listed in the Zoning Ordinance. Please provide the area of the individual gas pump, convenience store, and car wash.
10. Please explain the entrance feature. An entrance feature is not defined in the Ordinance.
11. The inter-parcel access connection along the existing Gum Spring Road shown on SPEX 2006-0037 Community Corner Special Exception plat is not shown. Please show this connection.


**DEPARTMENT OF BUILDING AND DEVELOPMENT**

**COUNTY OF LOUDOUN**

**MEMORANDUM**

DATE: December 14, 2007

TO: Stephen Gardner, Project Manager, Department of Planning

FROM: William Marsh, Environmental Review Team Leader 

CC: Sarah Milin, Community Planner

**SUBJECT: SPEX-2007-0029 West Spine Plaza 1**

The Environmental Review Team (ERT) has comments pertaining to the current application, as follows:

1. No verifiable best management practice (BMP) treatment of stormwater emanating from this highly impervious site is indicated with this plan, as required by Section 6-1310(H) of the Revised 1993 Zoning Ordinance. The general location of a stormwater pond area on sheet 2 is likely too small to adequately treat stormwater quality and quantity. Please provide a clearer, more verifiable commitment to protecting surface water quality, as required by checklist item H.
2. This plan proposes 48 more parking spots than are required by the Zoning Ordinance for these uses. Staff recommends removing these extra parking spaces and using the created space for bioretention basins that would treat stormwater runoff from impervious surfaces. Approximately 7,700 square feet of bioretention basin area – roughly 48 parking spaces – can treat one inch of storm runoff from over 3.5 acres of impervious surface, per Minimum Standard 3.11 of the Virginia Stormwater Management Handbook. Besides providing a superior means of meeting checklist item H, this approach would also enable groundwater replenishment, consistent with checklist item M.
3. Staff encourages application of green building standards with this application. This commitment is consistent with the General Water Policies supporting long-term water conservation (Policy 1, Page 2-20), the Solid Waste Management Policies supporting waste reduction, reuse, and recycling (Policy 2, Page 2-23), and the Air Quality Policies supporting the creation of pedestrian and bicycle facilities (Policy 1, Page 5-41). Furthermore, the County encourages project designs that ensure long-term sustainability, as discussed in the Suburban Policy Area, Land Use and Pattern Design text (Page 6-2). As of June 2007, the East Gate development on Route 50 registered 42,000 square feet of retail use for

certification under Leadership in Energy and Environmental Design (LEED), referenced at <http://www.usgbc.org/LEED/Project/RegisteredProjectList.aspx>

Accordingly, staff recommends that the design and construction of this application incorporate LEED traits into some or all of the proposed uses.

4. The application proposes complete removal of existing, forested vegetation. Staff recommends incorporating existing hardwoods into buffers adjacent to Route 50 and the proposed West Spine Road. Evergreens may also be retained for buffering, exclusive of Virginia Pine over 25 years of age. Preservation of existing vegetation is consistent with landscaping requirements for Type 5 buffers along Route 50. It also fulfills Forest, Trees, and Vegetation Policy 7 of the Revised General Plan (RGP).
5. The application proposes complete removal of existing wetland and stream habitat. For any unavoidable impacts to wetlands or waters of the U.S., mitigation should occur in close proximity to the development, consistent with Policy 23 in Chapter 5, page 5-11, of the RGP.
6. Given the need for overnight accommodations similar to residential uses, the proximity of the proposed uses to Route 50 (a planned Principal Arterial) and West Spine Road (a planned Major Collector), and the location of the parts of the project within the Ldn 60 airport noise buffer, staff recommends that a commitment be provided to perform a traffic noise study and a building shell analysis prior to occupancy to ensure that interior noise levels do not exceed 45 decibels consistent with the Noise Policies of the Revised Countywide Transportation Plan (Page 4-7) and the Airport Noise Policies of the Revised General Plan (Page 5-46).
7. Staff is embarking on a project to map and inventory wetlands located within Loudoun County. We are requesting that the development community contribute digital data to this effort. Specifically, a digital data layer depicting the Corps-approved wetland delineation (including jurisdictional waters and wetlands), including the delineation of the respective study limits, is requested. Loudoun County's GIS uses ESRI software and can import .DXF data. Our coordinate system is Virginia State Plane. Datum NAD 83 data is preferable, if available. Metadata on the digital data (e.g., map scale, age, etc.) is also helpful. The requested information is currently depicted on the plan; however, if this information cannot be provided prior to approval of the special exception application, staff recommends that a commitment be provided indicating when this information will be submitted to the County.

Due to the scope of the comments provided, staff requests an opportunity to review the subsequent submission of this application. Please contact me if you need any additional information.

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**County of Loudoun**  
**Office of Transportation Services**

**MEMORANDUM**

**DATE:** March 17, 2009

**TO:** Stephen Gardner, Project Manager  
Department of Planning

**FROM:** Lou Mosurak, Senior Transportation Planner *LM*  
Art Smith, Senior Coordinator

**SUBJECT: SPEX 2007-0029 – West Spine Plaza  
Third Referral**



**Background**

This referral serves as an update of the status of the issues identified by the Office of Transportation Services (OTS) in the second OTS referral (dated August 26, 2008) on this application. The subject application proposes a number of special exception (SPEX) uses, namely a convenience store with gas pumps, a retail sales establishment, a drive through bank, and two restaurants. These SPEX uses, totaling approximately 30,000 sq ft, are proposed to be developed along with by-right flex-industrial, office, hotel and conference center uses in the CLI (Commercial Light Industry) zoning district. Total development proposed on site is approximately 172,000 sq ft. The approximately 20-acre subject site is located on either side of the future West Spine Road, east of Gum Spring Road (Existing Route 659) and south of John Mosby Highway (U.S. Route 50). A vicinity map is provided as *Attachment 1*; a reduced version of the SPEX plat is provided as *Attachment 2*. Ultimate access to the site would be via the future West Spine Road at a new intersection with South Point Drive. Until such time as the West Spine Road is fully completed, primary access for any development on the site would most likely be via an extension of South Point Drive from Gum Spring Road (Existing Route 659) through the existing Gum Spring Village Center development to the northwest.

This referral is based on review of materials received from the Department of Planning on January 28, 2009, including (1) a letter from the Applicant dated January 22, 2009 responding to second referral comments; (2) a revised statement of justification, prepared by the Applicant, dated January 22, 2009; (3) an updated traffic impact study addendum, prepared by Wells & Associates, LLC, dated December 19, 2008; and (4) a special exception plat/plan set, prepared by Huntley, Nyce & Associates, Ltd., dated February 10, 2008 and revised through January 20, 2009.

Please note that this referral supersedes comments made by the Office of Transportation Services that were sent to you via email on February 26, 2009.

### **Summary of Applicant's Updated Traffic Study Addendum**

The submitted updated traffic study addendum (dated December 19, 2008) was prepared in response to previous County and VDOT comments made in meetings with the Applicant as well as in written referrals. As in the Applicant's previous traffic study (dated July 29, 2008), the updated addendum continues to review two alternatives for the future road network in the area, namely Alternative 1, which analyzes an interim condition with only the northbound lanes of the West Spine Road and the continued utilization of the existing signalized, full-movement intersection at Route 50 and Route 659; and Alternative 2, which analyzes the network with the anticipated completion of a four-lane West Spine Road between Route 50 and Tall Cedars Parkway, signalization of the West Spine Road intersections with Route 50, Southpoint Drive, and Tall Cedars Parkway, and the closure of the median crossover at the existing Route 50/Route 659 intersection (resulting in only right-in/right-out movements at this location). The updated traffic study addendum also introduces the concept of phasing development on the site: Alternative 1 anticipates only the portion of the site to the west of the future West Spine Road being constructed prior to full completion (i.e., four-lanes to accommodate both northbound and southbound traffic) of the West Spine Road, while Alternative 2 anticipates full buildout of the site (2015) once the West Spine Road is completed and open to two-way traffic. *Attachment 3* depicts both alternatives. Further discussion of the updated study is provided below.

### **Status of Transportation Issues/Comments**

Staff comments from the first and second OTS referrals as well as the Applicant's responses (quoted directly from its July 30, 2008 and January 22, 2009 response letters) and current issue status, are provided below.

1. Initial Staff Comment (1<sup>st</sup> Referral): *Attachment 5 [in the first OTS referral]* shows Future (2010) Lane Use and Traffic Control as assumed in the applicant's traffic study. This network will not be in place and must be adjusted to provide adequate service level forecasts. As of now the only certain short-term access to this site is the local interparcel road (Southpoint Drive) running from this site through the Gum Spring Commercial Center to existing Route 659. Consistent with the approvals of the Gum Spring Commercial Center and Community Corner to the south this would allow currently-approved by-right development on the site. LOS at the Route 50/Route 659 intersection would likely be "F" during peak hours if by-right development builds out without major road improvements.

Based on information currently available to OTS, the following represents the likely road network which would be in place by 2010:

- a. Two lanes of the West Spine Road are likely to be in place between Tall Cedars Parkway and Route 50. They are currently being constructed by private sector proffer. (Please note that a small section of right-of-way needs to be dedicated from the Kim Property for this improvement to occur). If only these two lanes are in place VDOT staff prefers they be operated as northbound lanes of the future four-lane West Spine Road.

- b. With only two northbound lanes of the West Spine Road in operation it would not be possible to sever existing Gum Spring Road from Route 50. Instead, Gum Spring Road would need to continue to operate as a two-lane road, VDOT staff saying one northbound lane, one southbound lane.
- c. The West Spine Road will not be in place north of Route 50 by 2010 in conformance with the approved phasing on the Arcola Center ZMAP.
- d. There are proffers for the addition of the third eastbound and westbound lanes on Route 50. Since a CPAP has been submitted for the third eastbound lane and review is proceeding, it is likely it will be in place. The timing on construction of the third westbound lane is not certain and cannot be assumed to be in place.

An addendum should be prepared to the traffic study analyzing service levels for the road network likely to be in place by 2010. This study may indicate phasing of the project may be needed until such time as the two southbound lanes on the West Spine Road are completed between Route 50 and Tall Cedars Parkway to provide adequate LOS. Scoping of the addendum with the Applicant and VDOT would be welcomed by OTS.

*Applicant's Response (July 30, 2008):* As noted in the attached updated traffic study and confirmed with VDOT and County staff in the March 5, 2008 letter contained in Appendix E of the updated study, these elements were noted and incorporated into the updated traffic study.

*Issue Status (2<sup>nd</sup> Referral):* Issue resolved if Alternative 2 is in place prior to the buildout of the project (forecast year 2015). However, the traffic study does not realistically analyze LOS at the existing intersection of Route 659 and Route 50. The study shows left and right turn lanes on the Route 659 approach to the intersection. There is no public sector funds programmed for these new turn lanes and none are likely. Also, there are no private sector commitments to providing these lanes. The intersection will operate at lower LOS than forecast in the study. Therefore, the issue of whether this project needs phasing has not been resolved. The applicant could provide the missing turn lanes which would resolve the issue.

*Applicant's Response (January 22, 2009):* The attached updated study analyzes the U.S. Route 50/Gum Spring Road (VA Route 659) in its current configuration. Also, it is agreed that Alternative 2 (with the completion of the West Spine Road) is the preferred option if it is in place prior to the buildout of the project. Based on meetings with County and VDOT staff, the updated study analyzes a phased buildout of the site. Phase I examines the impacts of the site developed to generate no more trips than those allowed under by-right zoning with the existing road network outlined for Alternative 1 (with the northbound lanes of the West Spine Road) in place. Full buildout of the project will be conditioned upon the completion of the West Spine Road between existing Gum Spring Road and U.S. Route 50 as a four-lane roadway and is analyzed accordingly in the attached updated study.

**Current Issue Status:** OTS staff appreciates the Applicant's willingness to consider the phasing of site development to allow time for the surrounding road network to be constructed; completion of the West Spine Road will result in significantly improved access to the site.

From the updated traffic study, OTS staff understands that under Alternative 1 (Phase 1), development on the site would be limited to the SPEX development program proposed for the area west of the future West Spine Road. However, the updated study's trip generation table (*Attachment 4*) compares full by-right buildout of the site (both east and west of the West Spine Road) with only the portion of the proposed SPEX development program that would be located west of the West Spine Road. A comparison of equivalent amounts of by-right vs. SPEX development should be provided, and LOS comparisons for Alternative 1 (Phase 1) should be based on these amounts. Regardless, a phasing condition of approval that limits development to a portion of the overall SPEX program until the West Spine Road is completed needs to be discussed with the Applicant and included with the application. Further discussion on this matter is necessary.

2. **Initial Staff Comment (1<sup>st</sup> Referral):** The applicant should dedicate land sufficient to accommodate the ultimate southbound lanes of the West Spine Road between Route 50 and Tall Cedars Parkway including land necessary for a right turn lane into the Interparcel public road (Southpoint Drive). This right-of-way should be dedicated before zoning permits are issued for any development of the site.

**Applicant's Response (July 30, 2008):** *It is the Applicant's intention to provide this right-of-way for the West Spine Road.*

**Issue Status (2<sup>nd</sup> Referral):** If this right-of-way is provided up-front, the issue would be resolved.

**Applicant's Response (January 22, 2009):** *Agreed. It is the applicant's intent to provide the right-of-way for the West Spine Road up-front.*

**Current Issue Status:** OTS appreciates the Applicant's willingness to dedicate to the County the right-of-way for the southbound lanes of the West Spine Road as depicted on the SPEX plat. This dedication should take place as soon as possible following Board of Supervisors action on this application. Issue resolved, pending inclusion of a condition of approval to this effect.

3. **Initial Staff Comment (1<sup>st</sup> Referral):** The entity which has proffered initial two lanes of the West Spine Road is not responsible for the construction of a median crossover at the West Spine Road and the interparcel local road (Southpoint Drive). The role/obligations of this applicant in providing these intersection improvements needs to be clarified.



Applicant's Response (July 30, 2008): As mentioned in the previous response, it is the applicant's intention solely to provide right-of-way for the West Spine Road at this time. No construction is proposed for this roadway.

Issue Status (2<sup>nd</sup> Referral): Issue not resolved.

Applicant's Response (January 22, 2009): As discussed in meetings with County and VDOT staff, it is the applicant's intention to provide right-of-way for the West Spine Road. Necessary median crossovers will be constructed by the applicant where the Interparcel local road intersects West Spine Road.

**Current Issue Status:** The Applicant should provide crossover improvements and turn lanes at the intersection of Southpoint Drive and the West Spine Road. Issue resolved, pending inclusion of a condition of approval to this effect.

4. Initial Staff Comment (1<sup>st</sup> Referral): The Applicant's traffic study shows a traffic signal is needed at the West Spine Road/Interparcel Road (Southpoint Drive) intersection. The Applicant should provide this signal when warranted.

Applicant's Response (July 30, 2008): Acknowledged.

Issue Status (2<sup>nd</sup> Referral): If acknowledged means yes, this issue is resolved.

Applicant's Response (January 22, 2009): Agreed. The applicant intends to provide for a traffic signal, when warranted and approved by VDOT, at the West Spine Road/South Point Drive (Interparcel Road) intersection. It is noted that the proposed traffic signal at the West Spine Road/U.S. Route 50 intersection is proffered by multiple projects. These funds could be used by the County to construct the West Spine Road/South Point Drive traffic signal.

**Current Issue Status:** It is noted that a traffic signal at the intersection of Southpoint Drive and the West Spine Road will provide significant benefit to this development, facilitating access to the site along both sides of the West Spine Road. Any excess funds from other applications for Route 50 signalization would most likely need to be used on Route 50. For example, there is no allocated funding for reconfiguration of the existing intersection of Route 50 and Route 659 including median closure.

A condition of approval requiring the Applicant to install a traffic signal at the intersection of Southpoint Drive and the West Spine Road should be included with this application. The condition language should also require the Applicant to fund the cost of any necessary traffic signal warrant studies. Issue resolved, pending inclusion of condition language to this effect.

5. Initial Staff Comment (1<sup>st</sup> Referral): Land should be reserved for a future diamond format interchange at Route 50/West Spine Road. The interchange area reserved by Gum

Springs Commercial Center can be used as a guide. Please note that the third eastbound Route 50 lane is being built in the median and additional right-of-way is not required.

Applicant's Response (July 30, 2008): *Land for the reservation of a future diamond format interchange at Route 50/West Spine Road is provided in the landscape buffer. The applicant notes that the third eastbound lane is being built in the median and additional right-of-way is not required.*

Issue Status (2<sup>nd</sup> Referral): The land reservation for the future interchange should match that which exists on the west side of the West Spine Road. A conceptual design exists for this interchange. The Applicant could try to document how an interchange could be built in existing Route 50 right-of-way. The reason the third eastbound lane is being built in the median is right-of-way limitations.

Applicant's Response (January 22, 2009): *Agreed. Conceptual designs for the planned U.S. Route 50/West Spine Road have been consulted and incorporated into site plans for the development.*

**Current Issue Status:** The Applicant has added Sheet 4A to the SPEX plat, depicting a possible configuration/footprint of a single point urban diamond interchange at Route 50 and the West Spine Road, and has identified right-of-way reservation for such a design. A condition of approval regarding this right-of-way reservation should be included with this application.

It should be noted that the determination of a final interchange design for this location is likely many years in the future. While there is a reasonable expectation that a single point urban diamond interchange would be appropriate for this location, VDOT has not endorsed this design concept. The design of the interchange is therefore subject to change, and acquisition of additional right-of-way from this site may be necessary. OTS staff is available for further discussion of this matter with the Applicant and VDOT.

6. Initial Staff Comment (1<sup>st</sup> Referral): The applicant's responsibilities for providing a multi-purpose trail along the West Spine Road need to be clarified. Such a trail could be within public right-of-way or a private easement.

Applicant's Response (July 30, 2008): *Right-of-way for a multi-purpose trail is provided in the revised Special Exception Plat.*

Issue Status (2<sup>nd</sup> Referral): OTS supports the comment in the Comprehensive Planning referral on trails. Please note that approved construction plans for Route 659 south of Tall Cedars Parkway show trails on both sides of the road.

Applicant's Response (January 22, 2009): *Agreed. Right-of-way for multi-purpose trails is being provided on site plans for the development. However, it should be noted that the*

*applicant has no control over property at the existing Gum Spring Road (VA Route 659)/Tall Cedars Parkway intersection or south of it.*

**Current Issue Status:** The provision of right-of-way for multi-purpose trails along the West Spine Road and Route 50 is appreciated. It is noted that the Applicant, in its January 22, 2009 response to the August 21, 2008 Comprehensive Planning referral, has agreed to provide the easements for the multi-purpose trails, as shown on the SPEX plat, and to construct the trails once the Route 50/West Spine Road interchange is constructed and off-site trails from other adjacent properties are in place. Given the uncertainty regarding the timing of road construction and the lack of existing trail connections in this area, OTS staff generally agrees with the concept of delayed trail construction. However, OTS staff further recommends that the Applicant post a bond to cover the cost of trail construction should it not be completed by the Applicant in the future. Issue resolved, pending the inclusion of a condition of approval to this effect.

7. **Initial Staff Comment (1<sup>st</sup> Referral):** There appears to be no pedestrian facilities on site. Appropriate pedestrian facilities should be provided.

**Applicant's Response (July 30, 2008):** *Appropriate pedestrian facilities are shown on the revised Special Exception Plat.*

**Issue Status (2<sup>nd</sup> Referral):** The sidewalk network shown on the Special Exception Plat is appreciated. Please note sidewalks should be a minimum of 5 feet in width. OTS agrees with Comprehensive Planning on the need for, and characteristics of, a pedestrian crossover of the West Spine Road.

**Applicant's Response (January 22, 2009):** *Agreed. Sidewalk widths have been designed to be 5 feet in width. A pedestrian crossover of West Spine Road has been provided on the site plan in conformance with OTS and Comprehensive Planning comments.*

**Current Issue Status:** The SPEX plat depicts sidewalks that are only four (4) feet in width, not five (5) feet wide as indicated by the Applicant. Further, no "pedestrian crossover" is shown on the SPEX plat, as indicated by the Applicant. The SPEX plat should be revised accordingly to depict both of these pedestrian amenities. Issue resolved pending plat revisions.

8. **Initial Staff Comment (1<sup>st</sup> Referral):** The location and funding responsibilities for the future cul-de-sac on existing Route 659 south of Route 50 needs further discussion. OTS does not object to the location shown in the applicant's traffic study provided right-of-way can be obtained and it is constructed at no cost to the public. It is noted the applicant's desires to abandon existing Route 659 along their frontage. OTS does not object providing the cul-de-sac issue is resolved. Please note that assuming the abandonment, the alignment shown for existing Route 659 (Alternative 1) to Tall Cedars parkway in the traffic study is impossible.

Applicant's Response (July 30, 2008): Acknowledged. It should be noted that the attached updated traffic study assumes that if existing Gum Spring Road were to terminate in a cul-de-sac, right-in/right-out access at U.S. Route 50 would be maintained and access from existing Gum Spring Road to Tall Cedars Parkway would be abandoned.

Issue Status (2<sup>nd</sup> Referral): A location for a cul-de-sac of existing Route 659 acceptable to OTS is being reviewed as part of a CPAP for the road. The applicant is proposing that the median crossing and signal at the intersection of existing Route 659/Route 50 be removed, but that a right turn in/right turn out entrance be allowed to remain. OTS views this as a VDOT decision until this section of Route 50 becomes limited access. Once the interchange at the West Spine Road is constructed, this entrance should be closed. In the interim, if VDOT allows the entrance, the right turn lane will need to be improved to comply with the recently issued "VDOT Access Management Regulations for Principal Arterials, July 1, 2008." Improvements to the turn lane should be the responsibility of the applicant.

Applicant's Response (January 22, 2009): Acknowledged. As mentioned previously, the two scenarios analyzed in the attached updated study were based on consultation with VDOT and assume full access to Gum Spring Road (VA Route 659)/U.S. Route 50 in phase 1 and right-in/right-out access at build out.

**Current Issue Status:** The Applicant's response focuses on the proposed long-term right-in/right-out entrance at existing Route 659 and Route 50, as identified in Alternative 2. Please note if this were a new entrance, OTS would oppose it consistent with our position on other applications along Route 50. However, it is not a new entrance, but rather the result of a proposed reconfiguration of an existing, off-site intersection owned and operated by VDOT. As such, the decision regarding any modifications to this intersection (i.e., removing the signal and median crossover, allowing certain right-in/right-out movements, or closing the intersection completely) as well as terminating Gum Spring Road to the south (north of Tall Cedars Parkway) appropriately rests with VDOT. Any modifications to this intersection until such time as alternate north-south connections are in place (e.g., the West Spine Road north of Route 50) need to be reviewed with VDOT as part of an analysis the larger road network in this area. This larger discussion is beyond the scope of this application. OTS staff notes that a separate traffic study for the pending Stone Ridge Commercial rezoning application (ZMAP 2006-0011), dated January 2009 (also prepared by Wells & Associates, LLC) assumes the complete closure of the southern half of the Route 50/659 intersection by 2015, along with a cul-de-sac installed north of Tall Cedars Parkway. The Stone Ridge study also assumes the extension of Southpoint Drive west from Gum Spring Road to Millstream Drive in Stone Ridge.

OTS's original focus of this comment was regarding the termination of Gum Spring Road to the north of Tall Cedars Parkway, as identified in Alternative 2. The SPEX plat identifies the Applicant's desire to abandon the portion of Gum Spring Road



right-of-way along the site's western boundary, and add that area to the overall site. OTS notes that abandonment of this right-of-way is not guaranteed, and would need to go through the appropriate process once the larger network issue identified above is resolved. It is not clear if Gum Spring Road ultimately needs to be retained at all south of Southpoint Drive if all adjacent parcels (e.g., the Community Corner/Gateway Church parcel) have alternate access in place. Further discussion with VDOT and adjacent property owners is necessary.

#### **New Issue/Comment**

Since completion of the second referral dated August 26, 2008, OTS staff has identified the following additional issue/comment:

9. The Applicant should depict on the SPEX plat the lane configurations recommended in the traffic study for Southpoint Drive at the intersection with the West Spine Road (i.e., one lane for entering traffic and two lanes for exiting traffic on each side of the West Spine Road).

#### **Conclusion**

OTS appreciates the cooperation of the Applicant in addressing a complex access situation. Subject to resolution of the issues identified above, OTS would not object to the approval of this application. OTS staff is available to meet with the Applicant and VDOT to discuss project phasing, interim access to the site until completion of the West Spine Road south of Route 50, interchange design and additional right-of-way reservation, and VDOT's long-term plans for operation of the road network until such time as future road connections to the north of Route 50 are in place.

#### **ATTACHMENTS**

1. Site Vicinity Map
2. Special Exception Plat (Proposed Site Layout)
3. Future Roadway Control Alternatives (December 2008 Updated Traffic Study Addendum, Figure 4)
4. Trip Generation Table (December 2008 Updated Traffic Study Addendum, Table 2)

cc: Andy Beacher, Assistant Director, OTS  
Tom Walker, Senior Transportation Engineer, VDOT

A45

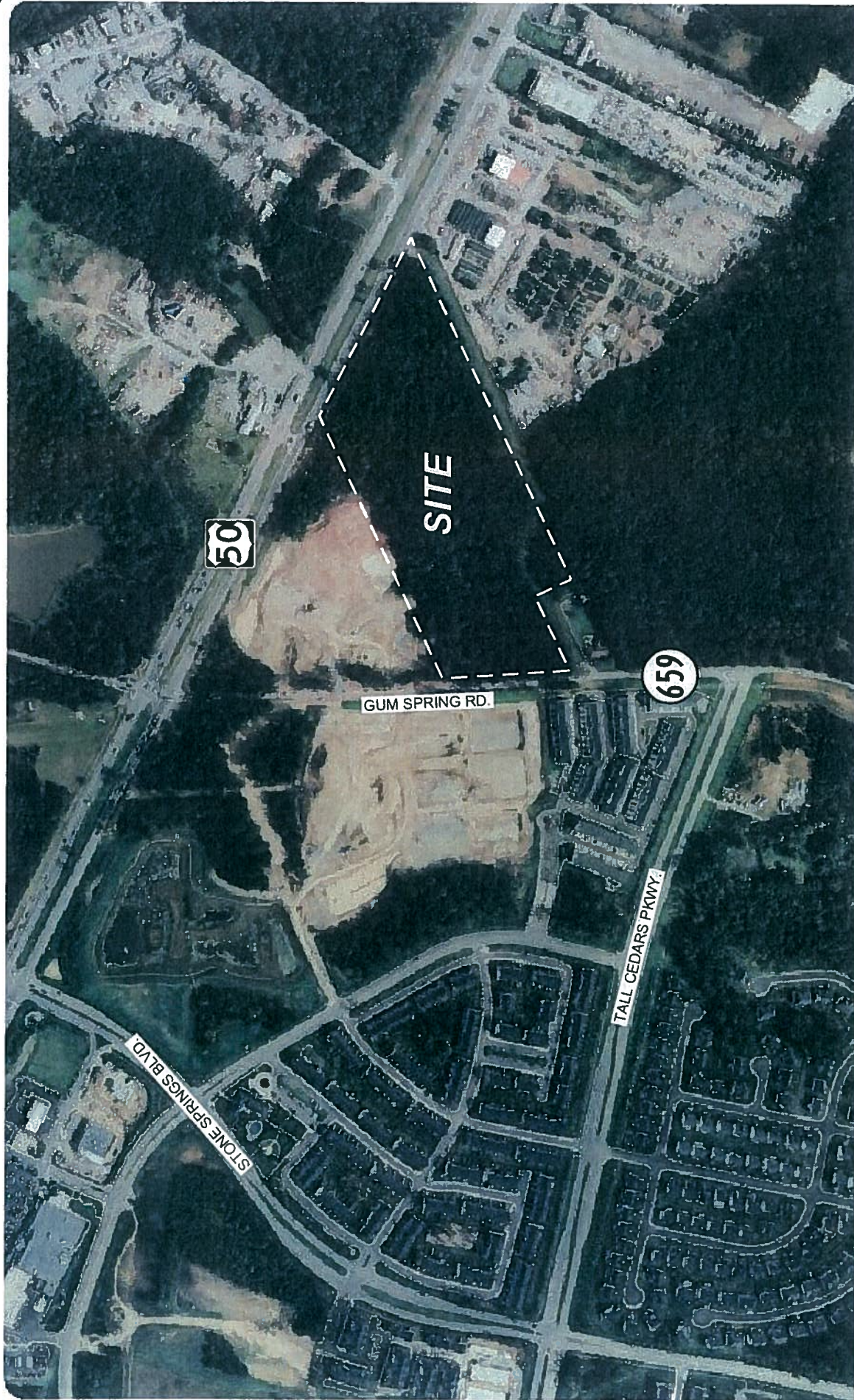


Figure 1  
Site Location





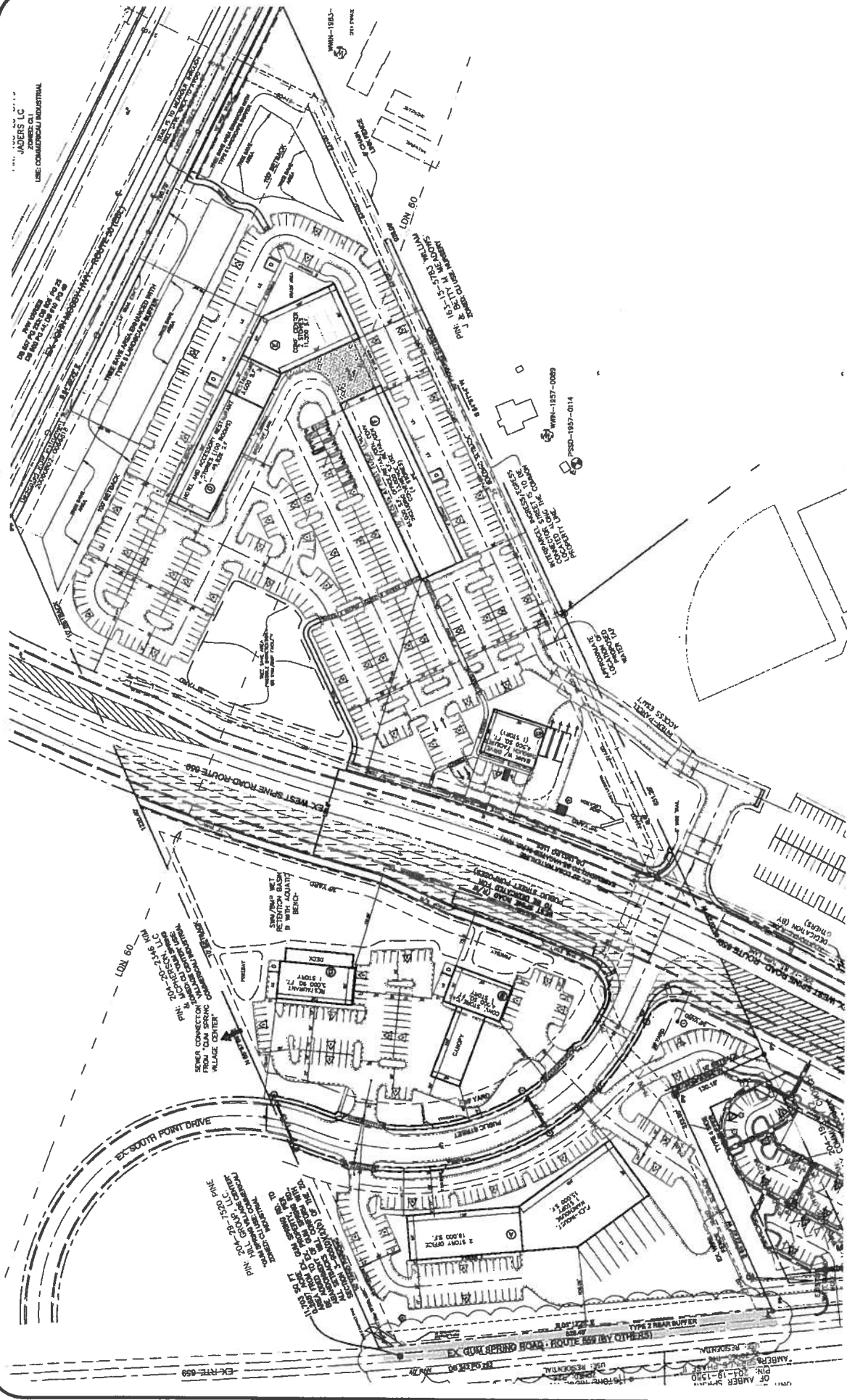


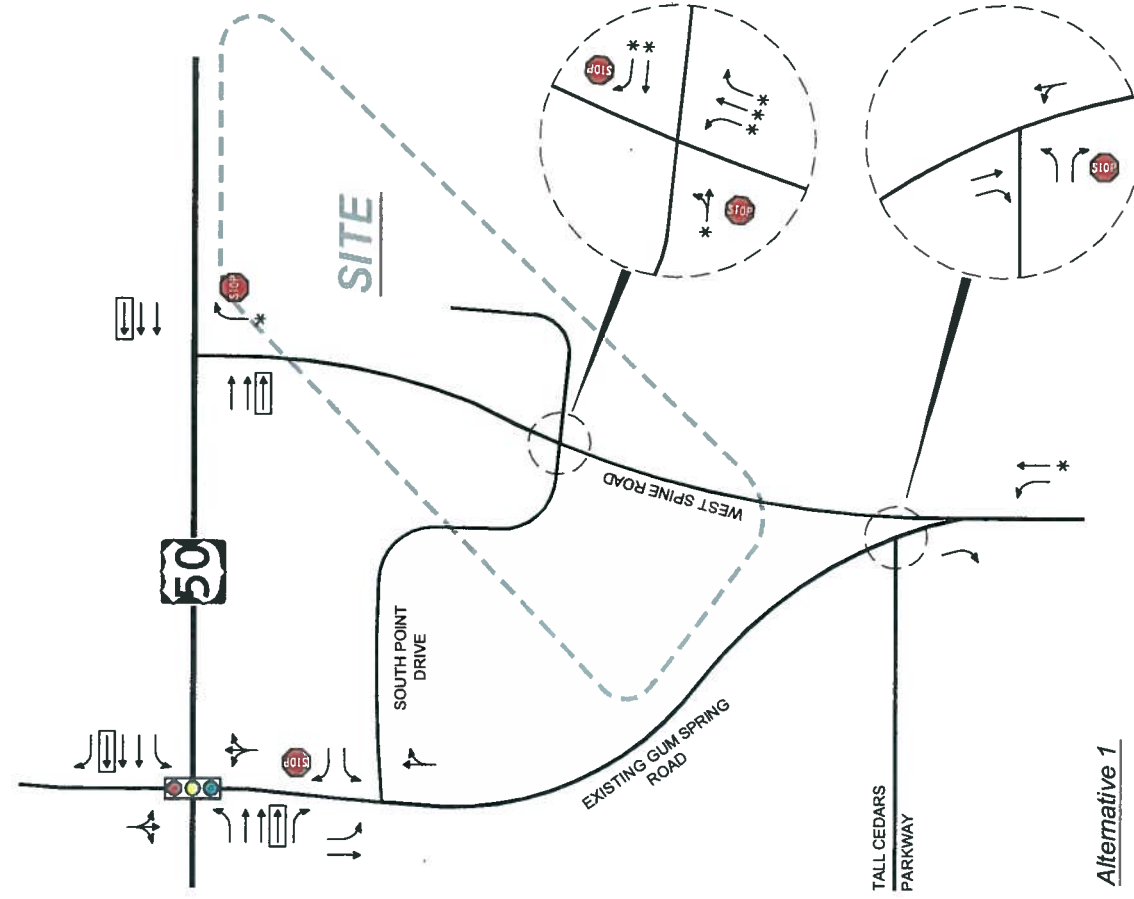
Figure 2  
Site Plan



West Spine Plaza  
Loudoun County, Virginia

## ATTACHMENT 2

A497



Alternative 1

Figure 4  
Future Roadway Controls



Alternative 2



Table 2  
West Spine Plaza  
Site Trip Generation Analysis (1)

Scenario	Land Use			AM Peak Hour			PM Peak Hour			Average Daily Trips
	Code	Amount	Units	In	Out	Total	In	Out	Total	
Approved (By-Right) Trip Generation										
Light Industrial	110	100,000	GSF	81	11	92	12	86	98	697
Office	710	110,000	GSF	178	24	202	35	168	203	1,436
Hotel (with Conference Center)	310	100	Rooms	28	20	48	26	27	53	892
Total (Approved By-Right)				287	55	342	73	281	354	3,025
Proposed (Special Exception) Trip Generation										
Phase I (West Side)										
Gas Station (with Convenience Market)	945	12	Fueling Pos.	60	61	121	80	81	161	1,953
High-Turnover (Sit-Down) Restaurant	932	5,000	GSF	30	28	58	33	22	55	636
Subtotal				90	88	178	113	102	215	2,589
Pass-By Reduction (2)		15	%	14	13	27	17	15	32	388
Retail Uses Subtotal				77	75	152	96	87	183	2,201
Office	710	18,000	GSF	33	4	37	7	35	42	265
Light Industrial	110	15,000		12	2	14	2	13	15	105
Total (Phase I)				121	81	202	105	135	240	2,571
Difference (Approved vs. Phase I Proposed)				(166)	26	(140)	32	(146)	(114)	(454)
Phase II Additions										
Bank	912	4,500	GSF	31	25	56	103	103	206	1,109
Retail	820	13,000	GSF	28	18	46	78	85	163	1,803
Subtotal				59	43	102	181	188	369	2,912
Pass-By Reduction (2)		15	%	10	6	17	27	28	55	437
Retail Uses Subtotal				49	36	85	154	160	314	2,475
Office	710	46,800	GSF	85	12	96	19	91	110	690
Hotel (with Conference Center)	310	100	Rooms	28	20	48	26	27	53	892
Total Phase II				161	68	229	199	278	476	4,057
Overall (Phase I + Phase II)				282	149	431	304	412	716	6,628
Difference (Approved vs. Buildout)				(5)	94	89	231	131	362	3,603

Notes:

- (1) Trip generation based on the Institute of Transportation Engineers' Trip Generation, 7th Edition.  
(2) Pass-by rate consistent with VDOT policy.

**County of Loudoun**  
**Office of Transportation Services**  
**MEMORANDUM**

**DATE:** August 26, 2008  
**TO:** Stephen Gardner, Project Manager, Department of Planning  
**FROM:** Art Smith, Senior Coordinator, Planning and Development  
**SUBJECT: SPEX 2007-0029**  
**West Spine Road Plaza**  
**Second Referral**



This referral will serve to update the status of the initial OTS comments on this special exception (SPEX) based on the applicant's responses in the updated traffic study (TIA) dated July 30, 2008 prepared by Wells & Associates. The analyses in the updated TIA will also be reviewed.

**Revised Traffic Study (TIA)**

The revised TIA analyzes two road network alternatives in the vicinity of the site. The first alternative (short-term) assumes that two lanes of the West Spine Road will be in operation between Tall Cedars Parkway and Route 50. These two lanes, as approved by VDOT, will operate as northbound lanes. At the same time, existing Route 659 will operate as a two lane road, one lane northbound, one lane southbound, between Tall Cedars Parkway and Route 50. The intersection of Route 659 and Tall Cedars Parkway will operate as designed by OTS. VDOT needs to formally approve this short-term operational alternative, CPAP review is currently underway. In the second alternative the West Spine Road would be expanded to four median divided lanes between Tall Cedars Parkway and Route 50. The existing Route 659 would terminate in a cul-de-sac north of Tall Cedars Parkway.

The time frame for Alternative 2 is not certain at this time but is assumed to be in place by the assumed 2015 buildout of this project. Please see Attachment 1 for a diagram of these two alternatives.

The development program for this application has changed as follows:

Approved Program

100,000 S.F. Industrial  
110,000 S.F. General Office  
100 Room Hotel/Conference Center

Proposed Special Exception Program

18,862 S.F. Industrial  
53,125 S.F. General Office  
100 Room Hotel/Conference Center  
4,500 S.F. Bank  
6 Pumps (12 Fueling positions) Gas Station with  
4,000 S.F. Convenience Store  
18,000 S.F. Retail  
5,000 S.F. Sit-Down Restaurant

Attachment 1 shows the comparative vehicle trip generations from the Approved Program and the Proposed Special Exception Program. The Proposed Program would generate an additional 3,856 daily vehicle trips (dvt) including 83 additional in the AM peak hour and 386 additional in the PM peak hour. The revised trip generation would be 6,881 dvt.

**Existing and Forecasted Traffic Volumes and Service Levels (LOS)**

Existing (November 2007) daily and peak hour traffic volumes are shown on Attachment 3. Average daily traffic volumes (ADT) on Route 50 east of its intersection with existing Route 659 have reached approximately 25,000 ADT. Existing Route 659 has approximately 10,500 ADT south of Route 50. Existing LOS at the Route 50/Route 659 intersection is E in both the AM and PM peak hours. Please see Attachment 4 for further details.

Daily and peak hour forecasted traffic volumes for Alternatives 1 and 2 for forecast year 2015 are shown on Attachment 5. Forecasted LOS for the two alternatives is shown on Attachment 4. Please note that the intersection of Route 50/Existing Route 659 will experience failing LOS levels even if two lanes of the West Spine Road are in operation (northbound operation). In order for adequate LOS in 2015, assuming project buildout, the West Spine Road will need to be improved to a four lane median divided road. In addition, traffic signals will be needed at the following intersections: Route 50/West Spine Road, West Spine Plaza Access/West Spine Road, Tall Cedars Parkway. Existing Route 659 would need to terminate in a cul-de-sac at an appropriate location north of Tall Cedars Parkway. If these improvements are in place all intersections proximate to the proposed SPEX would function at adequate LOS.

**Status of Transportation Issues Identified in the Initial OTS Referral**

Issue 1: Attachment 5 shows Future (2010) Lane Use and Traffic Control as assumed in the applicant's traffic study. This network will not be in place and must be adjusted to provide adequate service level forecasts. As of now, the only certain short-term access to this site is the local Interparcel road running through the Gum Springs Commercial Center to existing Route 659. Consistent with the approvals of the Gum Springs Commercial Center, and Community Corner to the south, this would allow currently approved by-right development on the site. LOS at the Route 659 intersection would likely be F during peak hours if by-right development builds out without major road improvements.

Based on information currently available to OTS, the following represents the likely road network which would be in place by 2010:

- a. Two lanes of the West Spine Road are likely to be in place between Tall Cedars Parkway and Route 50. They are being constructed by private sector proffer. (Please note a small section of right-of-way still needs to be dedicated from the Kim Property for this improvement to occur). If only these two-lanes are in place VDOT staff prefers they be operated as northbound lanes of the future four lane West Spine Road.
- b. With only 2 northbound lanes of the West Spine Road in operation, it would not be possible to sever Existing Gum Spring Road from Route 50. Instead, Gum Spring Road would need to continue to operate as a two lane road, with VDOT staff recommending one northbound lane, one southbound lane.
- c. The West Spine Road will not be in place north of Route 50 by 2010 in conformance with the approved phasing on the Arcola Center ZMAP.
- d. There are proffers for the addition of the third eastbound and westbound lanes on Route 50. Since a CPAP has been submitted for the third eastbound lane, and review is proceeding, it is likely it will be in place. The timing on construction of the third westbound lane is not certain and cannot be assumed to be in place.

An addendum should be prepared to the traffic study analyzing service levels for the road network likely to be in place in 2010. This study may indicate phasing of the project may be needed until such time as the two southbound lanes on the West Spine Road are completed between Route 50 and Tall Cedars Parkway to provide adequate LOS. Scoping of the addendum with the applicant and VDOT would be welcomed by OTS.

Response: As noted in the attached updated traffic study and confirmed with County and VDOT staff in the March 5, 2008 letter contained in Appendix E of the updated study, these elements were noted and incorporated into the updated traffic study.

Status: Issue resolved if alternative 2 is in place prior to the buildout of the project (forecast year 2015). However, the traffic study does not realistically analyze LOS at the existing intersection of Route 659 and Route 50. The study shows left and right turn lanes on the Route 659 approach to the intersection. There is no public sector funds programmed for these new turn lanes and none are likely. Also, there are no private sector commitments to providing these lanes. The intersection will operate at lower LOS than forecast in the study. Therefore, the issue of whether this project needs phasing has not been resolved. The applicant could provide the missing turn lanes which would resolve the issue.

Issue 2: The applicant should dedicate land sufficient to accommodate the ultimate southbound lanes of the West Spine Road between Route 50 and Tall Cedars Parkway, including land necessary for a right turn lane into the interparcel public road. This right-of-way should be dedicated before zoning permits are issued for any development on the site.

Response: It is the applicant's intention to provide this right-of-way for the West Spine Road.

Status: If this right-of-way is provided up-front, this issue would be resolved.

Issue 3: The entity which has proffered the initial two lanes of the West Spine Road is not responsible for the construction of a median crossover at the West Spine Road and the interparcel local road. The role/obligations of this applicant in providing these intersection improvements need to be clarified.

Response: As mentioned in the previous response, it is the applicant's intention solely to provide right-of-way for the West Spine Road at this time. No role/obligation for providing the construction of a median crossover has been determined at this time.

Status: Issue not resolved.

Issue 4: The applicant's traffic study shows a traffic signal is needed at the West Spine Road/Interparcel Road intersection. The applicant should provide this signal when warranted.

Response: Acknowledged

Status: If acknowledged means yes, this issue is resolved.

Issue 5: Land should be reserved for a future diamond format interchange at Route 50/West Spine Road. Please note that VDOT has not approved construction plans for this interchange and its right-of-way requirements may need further adjustment in the future. The interchange area reserved by Gum Springs Commercial Center can be used as a guide. Please note the third eastbound Route 50 lane is being built in the median and additional right-of-way is not required.



Response: Land for the reservation of a future diamond format interchange at Route 50/West Spine Road is provided in the landscape buffer. The applicant notes that the third eastbound Route 50 lane is being built in the median and additional right-of-way is not required.

Status: The land reservation for the future interchange should match that which exists on the west side of the West Spine Road. A conceptual design exists for this interchange. The applicant could try to document how an interchange could be built in existing Route 50 right-of-way. The reason the third eastbound lane is being built in the median is right-of-way limitations.

Issue 6: The applicant's responsibilities for providing a multi-purpose trail along the West Spine Road need to be clarified. Such a trail could be within public right-of-way or a private easement.

Response: Right-of-way for a multi-purpose trail is provided in the revised Special Exception Plat.

Status: OTS supports the comment in the Comprehensive Planning referral on trails. Please note that approved construction plans for Route 659 south of Tall Cedars Parkway show trails on both sides of the road.

Issue 7: There appears to be no pedestrian facilities at all on site. Appropriate pedestrian facilities should be provided.

Response: Appropriate pedestrian facilities are shown in the revised Special Exception Plat.

Status: The sidewalk network shown on the Special Exception Plat is appreciated. Please note sidewalks should be a minimum of 5 feet in width. OTS agrees with Comprehensive Planning on the need for, and characteristics of, a pedestrian crossover of the West Spine Road.

Issue 8: The location and funding responsibilities for the future cul-de-sac on existing Route 659 south of Route 50 needs further discussion. OTS does not object to the location shown in the applicant's traffic study, provided right-of-way can be obtained, and it is constructed at no cost to the public. It is noted the applicant's desires to abandon existing Route 659 along their frontage. OTS does not object, providing the cul-de-sac issue is resolved. Please note that assuming the abandonment, the alignment shown for existing Route 659 to Tall Cedars Parkway in the traffic study is impossible.

Response: Acknowledged. It should be noted that the attached updated traffic study assumes that if existing Gum Spring Road were to terminate in a cul-de-sac, right-in/right-out access at US Route 50 would be maintained and access from existing Gum Spring Road to Tall Cedars Parkway would be abandoned.

**Status:** A location for a cul-de-sac of existing Route 659 acceptable to OTS is being reviewed as part of a CPAP for the road. The applicant is proposing that the median crossing and signal at the intersection of existing Route 659/Route 50 be removed, but that a right turn in/right turn out entrance be allowed to remain. OTS views this as a VDOT decision until this section of Route 50 becomes limited access. Once the interchange at the West Spine Road is constructed, this entrance should be closed. In the interim, if VDOT allows the entrance, the right turn lane will need to be improved to comply with the recently issued "VDOT Access Management Regulations for Principal Arterials, July 1, 2008". Improvements to the turn lane should be the responsibility of this applicant.

**Conclusion**

The application has addressed some concerns, but there are still unresolved issues. It is recommended this application be referred to a PC Committee to facilitate resolution of these issues.

Attachments

cc: Andy Beacher, Assistant Director

A55

**County of Loudoun**  
**Office of Transportation Services**  
**MEMORANDUM**

**DATE:** December 27, 2007  
**TO:** Stephen Gardner, Project Manager, Department of Planning  
**FROM:** Art Smith, Senior Coordinator, Planning and Development *AS*  
**SUBJECT: SPEX 2007-0029 West Spine Plaza  
First Referral**



**Background**

The applicant is seeking a special exception for the following land uses:

- 7,020 sf Convenience Store with gas pumps and car wash
- 5,005 sf Restaurant
- 18,000 sf Retail
- 4,500 sf Bank with drive through
- 130,378 sf By-Right Use (Flex Industrial, Office, Hotel, Conference Center)

The project site consists of approximately 20.2 acres. It is bounded on the north by Route 50 and on the west by existing Route 659, Gum Spring Road. The future West Spine Road south of Route 50 will run between the east and west sections of the property. Please see Attachment 1, Project Site Location.

**Project Trip Generation**

The proposed land uses would generate 7,422 daily weekday vehicle trips including 525 in the AM peak hour and 820 in the PM peak hour. There are currently 3,025 daily weekday trips which would be generated due to by-right development. The proposed development thus represents a 4,397 daily vehicle trips increase.

**Existing, Programmed and Planned CTP Transportation System**

Route 50, John Mosby Highway is currently a four-lane median divided minor arterial along the frontage of the proposed project. Ultimately, it is planned in the CTP to be

expanded to a six-lane major arterial in a 200-foot right-of-way. This segment of Route 50 is planned to become limited access with an interchange located at the future temporary intersection of Route 50/West Spine Road. The interchange is planned to be a diamond format.

The West Spine Road (Route 606 Extended) is planned to ultimately be a six-lane median divided major collector as it passes through the site. It will have a four-lane interim section and likely a two-lane short term condition. Required right-of-way is 120 feet plus right-of-way required for turn lanes. Bicycle/Pedestrian facilities need to be provided proximate to this road.

Existing Route 659, Gum Spring Road, is currently a two-lane major collector road between Route 50 and Tall Cedars Parkway. This section is planned to be severed by a cul-de-sac whose location is yet to be determined. It will therefore no longer serve through movements. Segments of existing Route 659 south of Route 50 and north of Tall Cedars Parkway may be abandoned once the cul-de-sac is constructed.

### **Existing and Forecast Traffic Volumes and Service Levels**

Existing peak hour and daily weekday traffic volumes are shown on Attachment 2. Daily traffic volumes (ADT) on Route 50 are approximately 19,940 ADT west of Gum Spring Road and 27,090 east of Gum Spring Road. Gum Spring Road immediately south of Route 50 has approximately 11,090 ADT. South of Tall Cedars Parkway the road's ADT is approximately 10,590. Please note Attachment 2 also shows existing lane use and traffic control. The intersection of Route 50/Route 659 is currently signalized. The intersection of Tall Cedars Parkway/Route 659 is currently under stop sign control. Existing peak hour service levels are shown on Attachment 3. An inadequate LOS E exists during AM and PM peak hours at the Route 50/Route 659 intersection.

Forecasted year 2010 total peak hours and daily weekday traffic volumes, including vehicle trips from this proposed project are shown on Attachment 4 as is a proposed year 2010 road network. Forecasted peak hour 2010 service levels are shown on Attachment 3. However, please be cautioned that service levels will depend on what road network is actually in place by 2010. Please see Issue 1 which follows.

### **Transportation Issues**

1. Attachment 5 shows Future (2010) Lane Use and Traffic Control as assumed in the applicant's traffic study. This network will not be in place and must be adjusted to provide adequate service level forecasts. As of now the only certain short-term access to this site is the local interparcel road running from this through the Gum Springs Commercial Center to existing Route 659. Consistent with the approvals of the Gum Springs Commercial Center and Community Corner to the south this would allow currently approved by-right development on the site. LOS at the Route

50/Route 659 intersection would likely be F during peak hours if by-right development builds out without major road improvements.

Based on information currently available to OTS the following represents the likely road network which would be in place by 2010:

- a. Two lanes of the West Spine Road are likely to be in place between Tall Cedars Parkway and Route 50. They are being constructed by private sector proffer. (Please note a small section of right-of-way still needs to be dedicated from the Kim Property for this improvement to occur). If only these two-lanes are in place VDOT staff prefers they be operated as northbound lanes of the future four lane West Spine Road.
- b. With only 2 northbound lanes of the West Spine Road in operation it would not be possible to sever Existing Gum Spring Road from Route 50. Instead Gum Spring Road would need to continue to operate as a two lane road, VDOT staff saying one northbound lane, one southbound lane.
- c. The West Spine Road will not be in place north of Route 50 by 2010 in conformance with the approved phasing on the Arcola Center ZMAP.
- d. There are proffers for the addition of the third eastbound and westbound lanes on Route 50. Since a CPAP has been submitted for the third eastbound lane and review is proceeding it is likely it will be in place. The timing on construction of the third westbound lane is not certain and cannot be assumed to be in place.

An addendum should be prepared to the traffic study analyzing service levels for the road network likely to be in place in 2010. This study may indicate phasing of the project may be needed until such time as the two southbound lanes on the West Spine Road are completed between Route 50 and Tall Cedars Parkway to provide adequate LOS. Scoping of the addendum with the applicant and VDOT would be welcomed by OTS.

2. The applicant should dedicate land sufficient to accommodate the ultimate southbound lanes of the West Spine Road between Route 50 and Tall Cedars Parkway including land necessary for a right turn lane into the interparcel public road. This right-of-way should be dedicated before zoning permits are issued for any development on the site.
3. The entity which has proffered initial two lanes of the West Spine Road is not responsible for the construction of a median crossover at the West Spine Road and the interparcel local road. The role/obligations of this applicant in providing these intersection improvements needs to be clarified.



4. The applicant's traffic study shows a traffic signal is needed at the West Spine Road/Interparcel Road intersection. The applicant should provide this signal when warranted.
5. Land should be reserved for a future diamond format interchange at Route 50/West Spine Road. The interchange area reserved by Gum Springs Commercial Center can be used as a guide. Please note the third eastbound Route 50 lane is being built in the median and additional right-of-way is not required.
6. The applicant's responsibilities for providing a multi-purpose trail along the West Spine Road need to be clarified. Such a trail could be within public right-of-way or a private easement.
7. There appears to be no pedestrian facilities at all on site. Appropriate pedestrian facilities should be provided.
8. The location and funding responsibilities for the future cul-de-sac on existing Route 659 south of Route 50 needs further discussion. OTS does not object to the location shown in the applicant's traffic study provided right-of-way can be obtained and it is constructed at no cost to the public. It is noted the applicant's desires to abandon existing Route 659 along their frontage. OTS does not object providing the cul-de-sac issue is resolved. Please note that assuming the abandonment, the alignment shown for existing Route 659 to Tall Cedars Parkway in the traffic study is impossible.

## Conclusion

OTS will offer a recommendation once it has reviewed the applicant's responses to our comments. We recognize that the transportation problems in the vicinity of this application are complex and are willing to meet with the applicants, their neighbors and VDOT as necessary to determine equitable solutions.

AJS/lm

cc: Charles Yudd, Assistant County Administrator  
Terrie Laycock, Interim OTS Director  
Andy Beacher, Assistant Director  
Shaheer Assad, Senior Transportation Planner

## Attachments:

1. Project Site Location
2. Existing Traffic Volumes, Lane Use, Traffic Controls
3. Existing Peak Hour Service Volumes/Forecasted 2010 Peak Hour Service Volumes
4. Forecasted 2010 Traffic Volumes
5. Traffic Study's Assumed 2010 Road Network



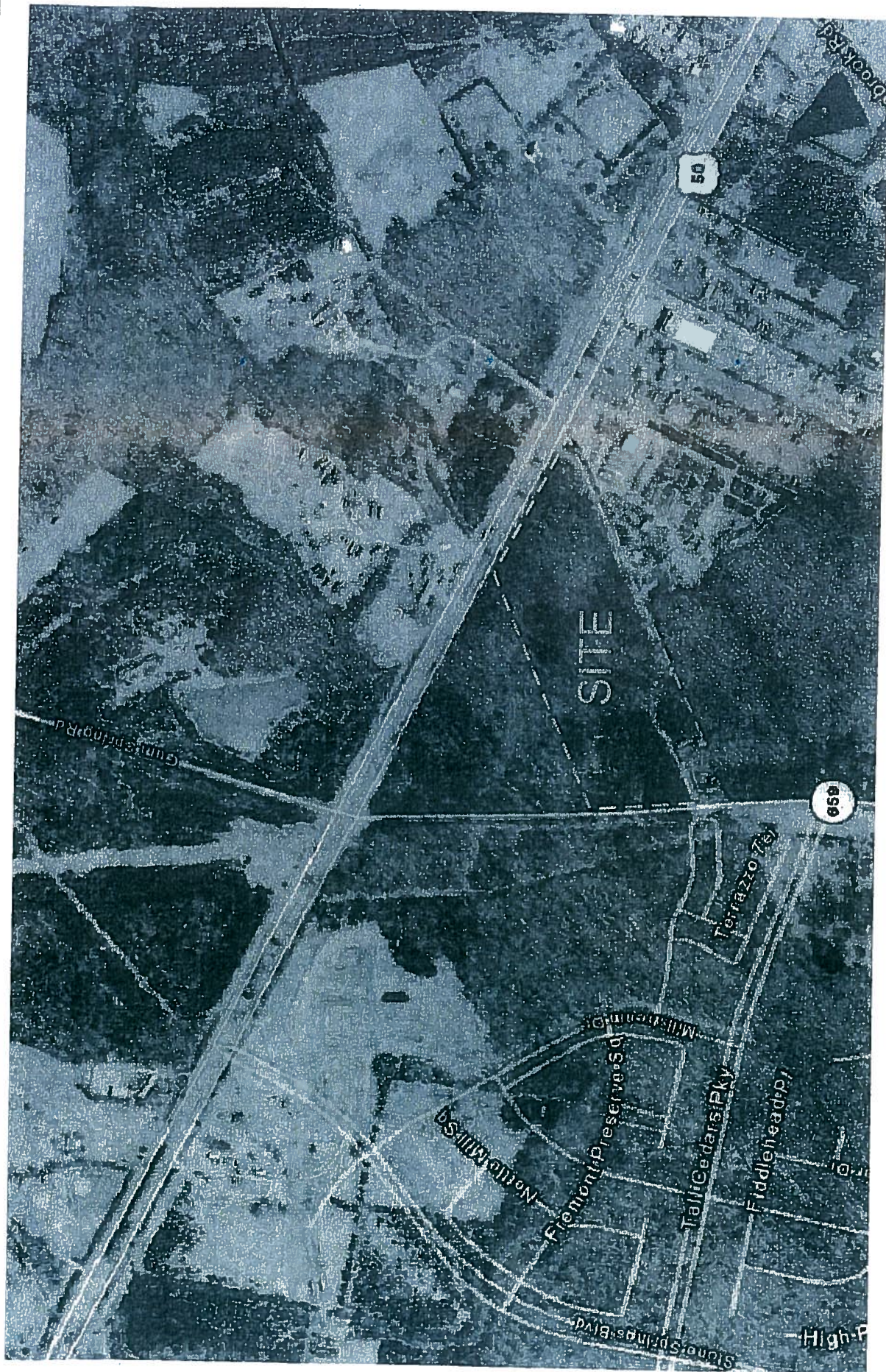
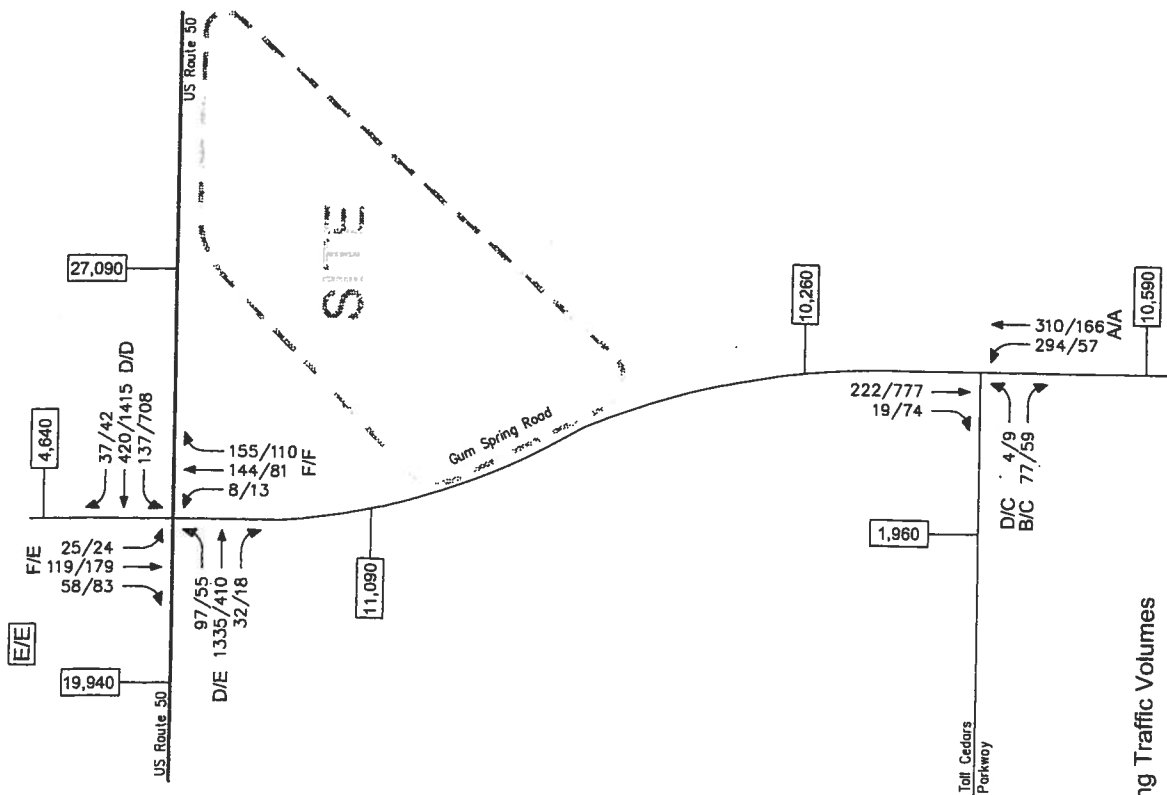


Figure 1  
Site Location

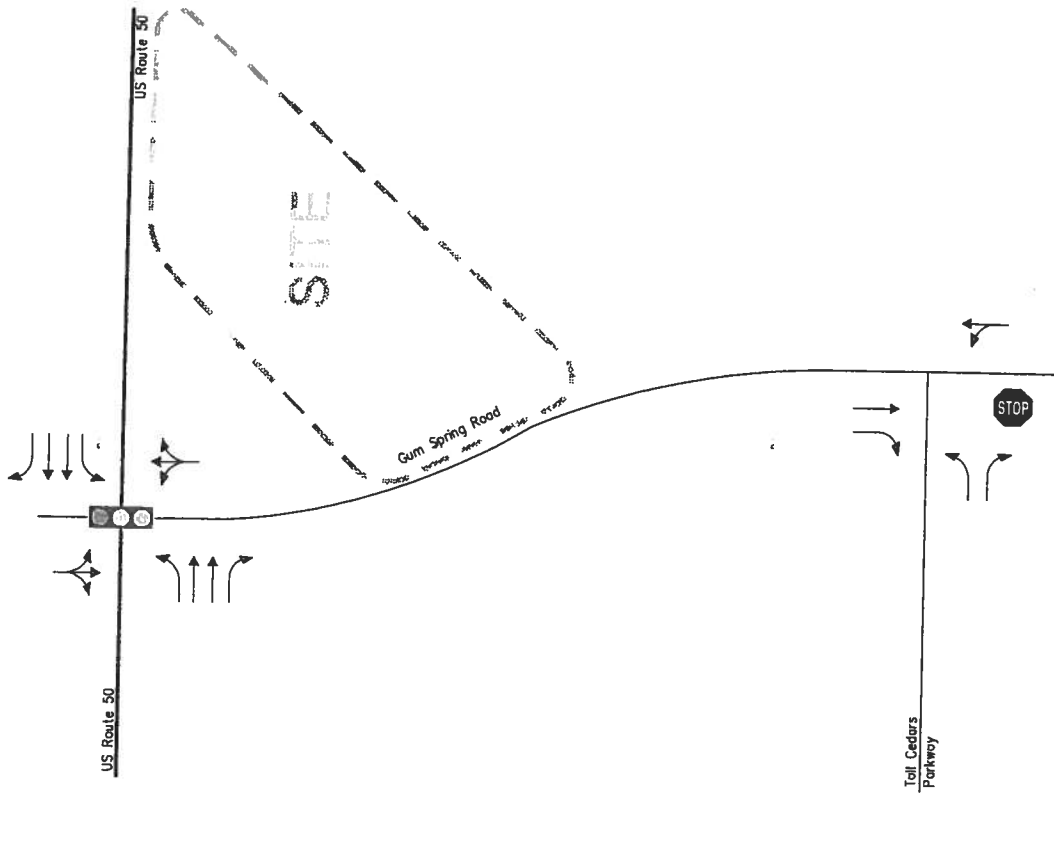




# ATTACHMENT 2



Existing Traffic Volumes



Existing Lane Use and Traffic Control

Figure 3

XXXX = Average Daily Traffic

Represents One Travel Lane  
Signalized Intersection  
Stop Sign

AM PEAK HOUR  
PM PEAK HOUR  
000/000

North

West Spine Plaza  
Loudoun County, Virginia

WELLS & ASSOCIATES, LLC  
TRAFFIC, TRANSPORTATION, AND PLANNING

Table I  
West Spine Plaza  
Future Intersection Levels of Service (1,2,3)

Intersection	Approach/ Control Movement		Existing 2006				Total Future 2010								Difference	
			AM Peak Hour		PM Peak Hour		Approved Zoning				Proposed Special Exception				(Proposed - Existing)	
			LOS	Delay (sec.)	LOS	Delay (sec.)	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM	PM		
U.S. Route 50 / Gum Spring Road	Signal	EB WB NB SB Overall	D D F E E	49.5 39.7 85.0 29.2 55.4	E D F E E	58.1 49.2 154.1 75.0 59.7	N/A				N/A				N/A	
U.S. Route 50 / West Spine Road	Signal	EB WB NB SB Overall	N/A				C C C D C	33.2 29.0 25.8 26.6 31.4	E E D D E	71.9 57.4 53.3 51.1 58.0	C C C C C	32.8 31.8 27.0 24.9 31.8	E E E E E	73.6 58.4 69.7 70.7 65.8	-0.4 2 1 -1 0.4	1.7 1.0 16.4 12.6 1.8
West Spine Access / West Spine Road	Stop Sign	EBLT WBLT NBL SBL	N/A				F E B B	983.0 36.2 10.5 11.8	F F D A	* 786.3 29.4 9.7	F E B B	* 47.5 11.0 11.2	F F E B	* * 39.3 11.2	* 11.3 0.5 -0.6	* * 0.9 1.1
	Signal	EB WB NB SB Overall	N/A				C C A A A	30.7 26.8 3.8 4.2 6.2	D C B C C	46.1 23.0 12.4 26.1 25.0	C C B A B	34.6 24.3 11.4 9.8 13.8	D C C D C	53.4 22.4 21.6 37.2 34.5	3.9 -2.5 7.6 5.6 7.6	3 -6 9.1 11.1 9.5
Tall Cedars Parkway / West Spine Road	Stop Sign	EBL EBR NBLT	D B A	29.6 10.0 5.6	C C A	23.8 17.0 3.4	F B C	* 12.4 19.1	F C F	* 18.9 322.6	F B C	* 12.7 20.4	F C F	* 18.6 359.5	* 0.3 1.3	* -0.3 36.9
	Signal	EB NB SB Overall	N/A				C A B B	33.0 7.4 19.3 16.0	D C C C	43.8 21.3 23.5 27.0	C A C B	34.8 7.5 20.4 16.8	C B C C	34.7 19.4 29.8 28.2	1.8 0.1 1.1 0.8	-9.1 -11.9 6.3 1.2

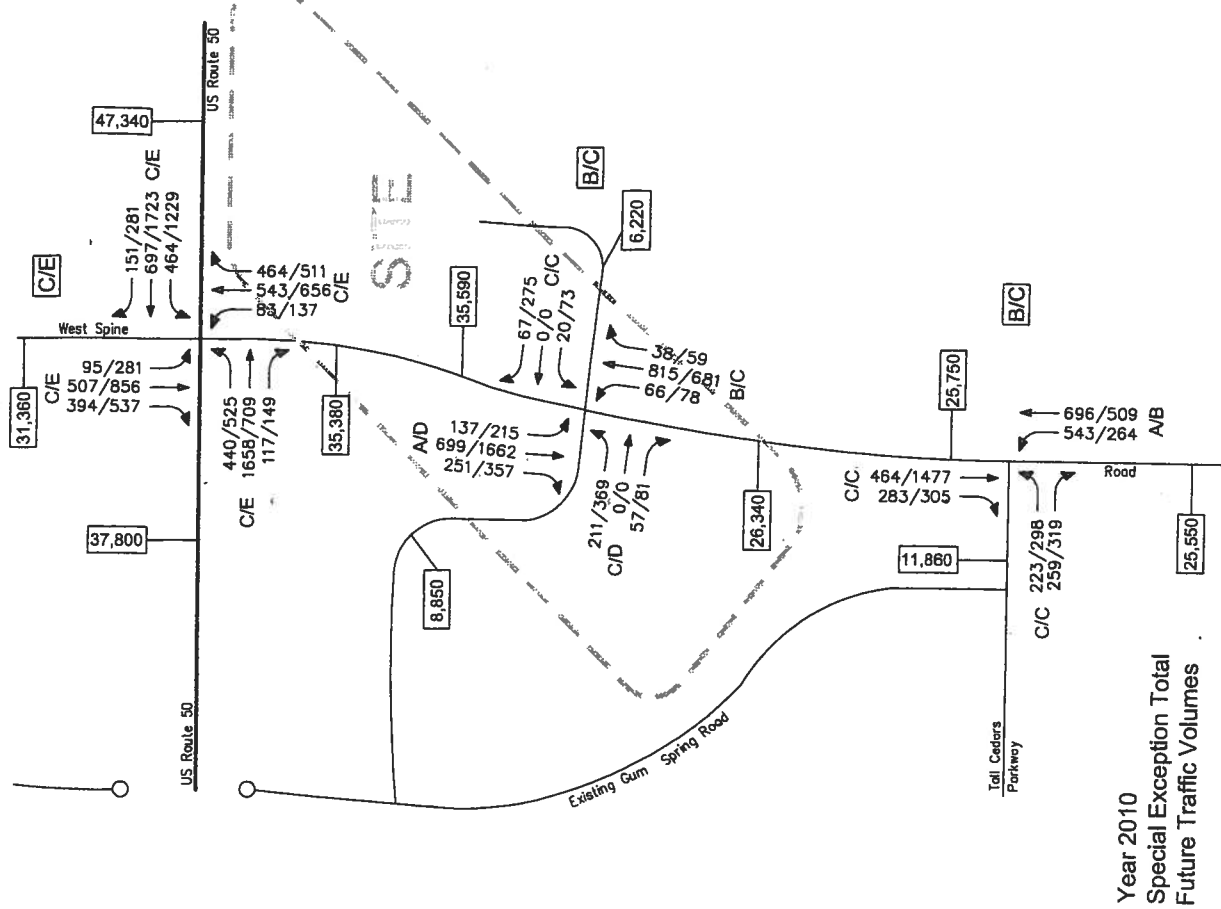
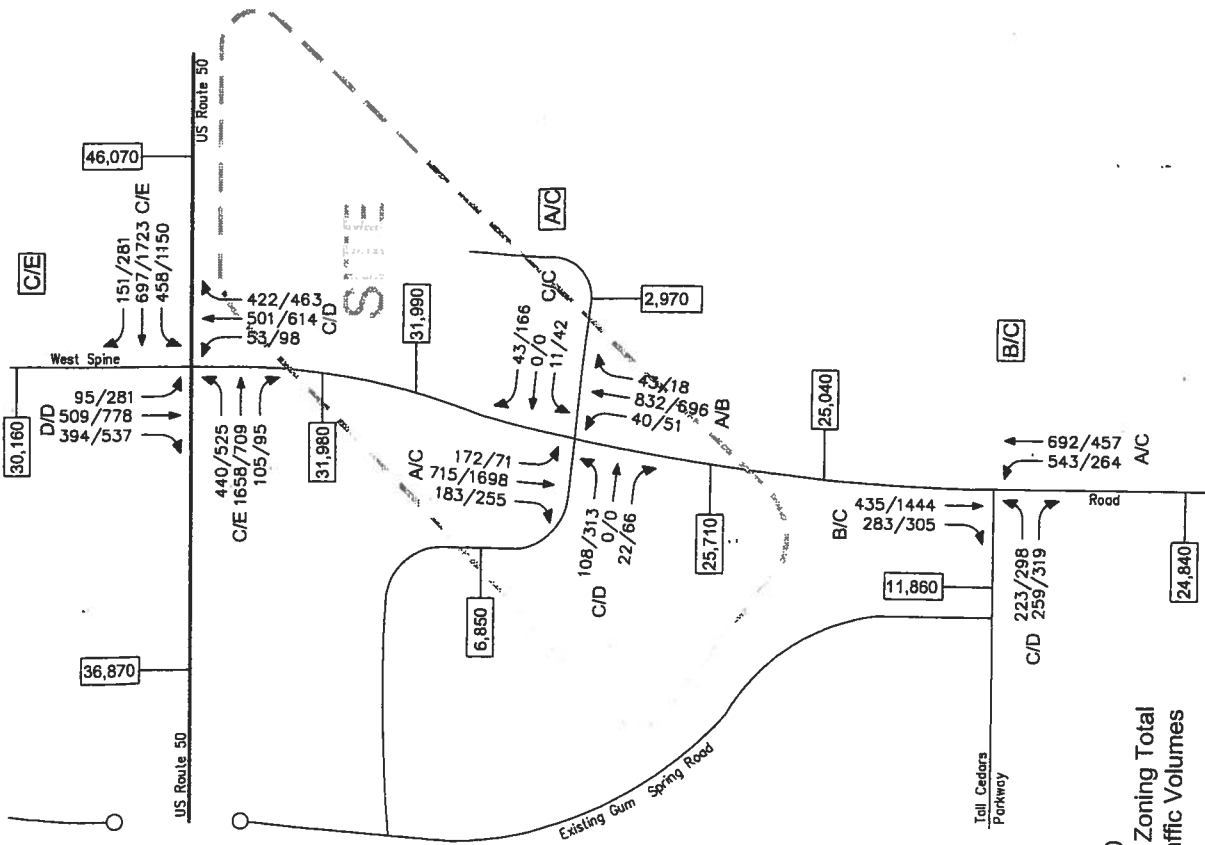
Notes:

(1) Greenhouse gas emissions are not calculated for this intersection.

Notes:

- (1) Capacity analysis based on Highway Capacity Manual methodology, using Synchro 6.0.
- (2) Numbers in parenthesis indicate average vehicle delay at a signalized intersection, in seconds.
- (3) Numbers in brackets indicate average vehicle delay at an unsignalized intersection, in seconds.

A62



ATTACHMENT 4

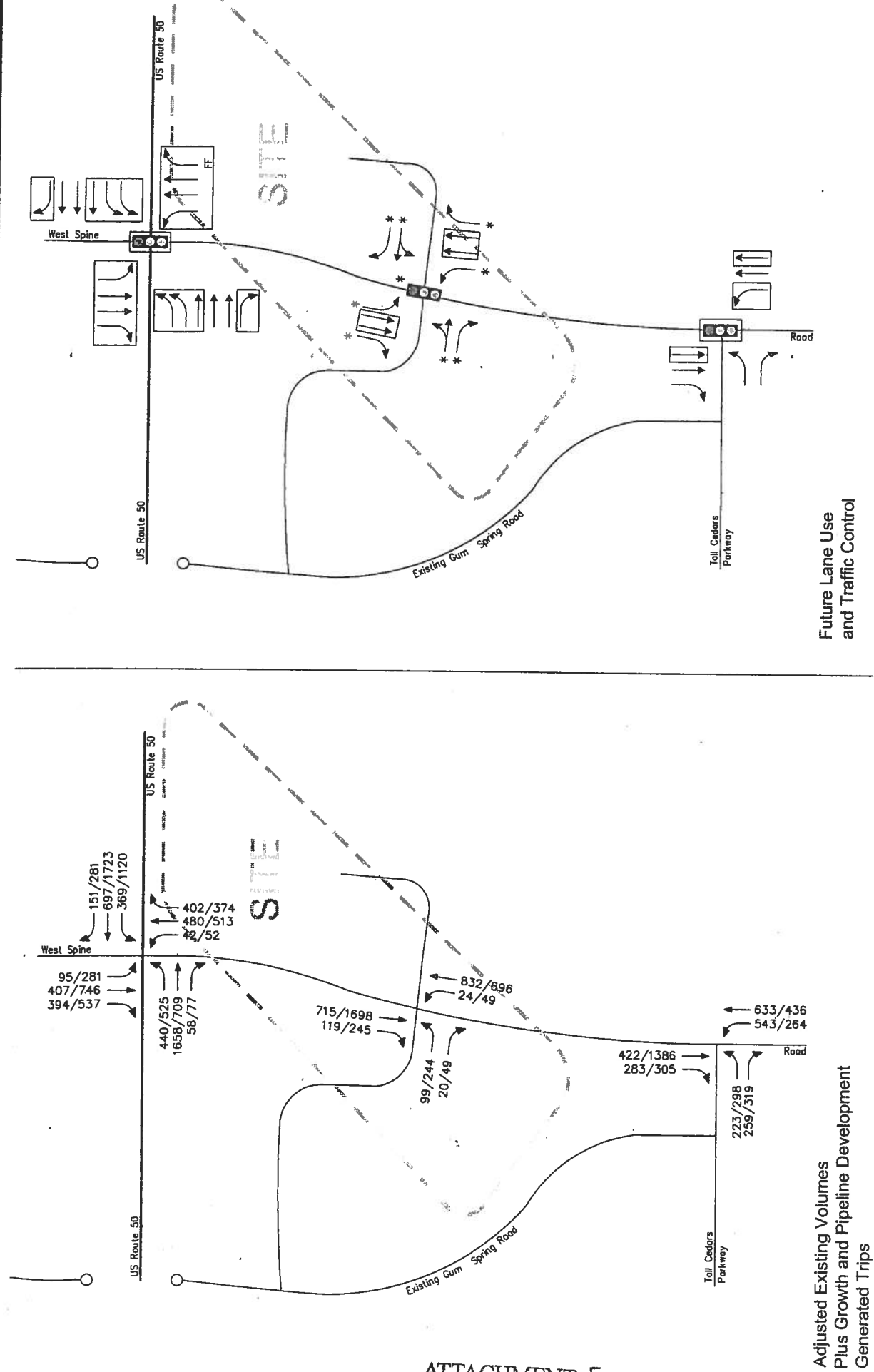
Figure 6

West Spine Plaza  
Woodson County, Virginia

WELLS & ASSOCIATES, LLC  
TRAFFIC, TRANSPORTATION, and PLANNING CONSULTANTS



U:\Projects\2001-2004\2040 West Spine Plaza\graphics\2040 rpt graphics.dwg (M)



Represents One Travel Lane  
 Signalized Intersection  
 Stop Sign  
 Proffered Improvements  
 Site Improvements

Figure 4

North  
 AM PEAK HOUR  
 PM PEAK HOUR  
 000/000

A64



# COMMONWEALTH of VIRGINIA

DAVID S. EKERN, P.E.  
COMMISSIONER

## DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway  
Chantilly, VA 20151  
(703) 383-VDOT (8368)

February 26, 2009

Mr. Steven Gardner, Project Manager  
County of Loudoun  
Department of Planning  
1 Harrison Street, S.E.  
P.O. Box 7000  
Leesburg, Virginia 20177-7000

Re: West Spine Plaza  
Loudoun County Application Number SPEX 2007-0029, Third Submission

Dear Mr. Gardner:

We have reviewed the above noted application as requested in your January 27, 2009 transmittal and we offer the following comments.

### Background

West Spine Plaza is located south of Rt. 50 and east of existing Gum Spring Road in Loudoun County, Virginia. It is consisted of approximately 20.2 acres, and is currently zoned for Commercial / Light Industrial use.

Under the current zoning, the property would consist of 100 KSF general light industrial, 110 KSF general office space, and a 100 room hotel use. However, the applicant proposes to obtain a special exception that would allow the site to include a bank, restaurant, and gas station with convenience store and car wash.

The applicant has proposed a 2-phase development, which has resulted in the current revised TIA. The first phase would generate less traffic than the by-right use. However, the second phase (full build-out) would generate an additional 89 a.m. peak hour trips, additional 362 p.m. peak hour trips and additional 3,603 daily trips than the by-right use.

Access to the site would be provided through the planned West Spine Road that bisects the property and connects Gum Spring Road south of Tall Cedars Pkwy to Rt. 50. Project build out year is 2015.

ATTACHMENT 1 *e*

The TIA includes two alternatives:

Alternative 1.

- a) Full access at the intersection of Gum Spring Road and Rt. 50
- b) Right out only at the intersection of West Spine Road and Rt. 50.
- c) One-way north only on West Spine Road from south of Tall Cedars to Rt. 50.

Alternative 2.

- a) Gum Spring Road would cul-de-sac north of Tall Cedars.
- b) Gum Spring Road and Rt. 50 would be stop controlled and limited to right-in right-out only.
- c) Full access at the intersection of Rt. 50 and West Spine Road.

The applicant has proffered to delay the development of phase 2 (full build-out) until Alternative 2 is implemented. The applicant has proposed to reserve the necessary right-of-way for construction of West Spine Road in its final four-lane cross section and all the turn lanes at site access. This means the special exception application for phase 1, which generates less traffic than the by-right use, would encompass the roadway network described in Alternative 1.

We offer the following comments:

1. We generally agree with the proposed 2-phase development process as a short term congestion mitigation measure in this sub-region. Under this process, Phase 1 would encompass existing roadway network while generating less traffic than the approved zoning, hence reducing pressure on the already failing intersection of Gum Spring Road and Rt. 50. Full construction of the proposed special exception application (Phase 2) is agreed by the developer to be delayed until construction of a larger, more efficient roadway network in this area. However, in order to determine the optimum roadway network in this sub-region as a long term mitigation measure a detailed analysis of the entire sub-region is required.
2. The study lacks the analysis of what the applicant is proffering, namely the analysis of Alternative 1-Phase 1. Generally the following scenarios should be examined. The ? indicates the development year is unclear. Certainly the year 2015 indicated in the TIA can not be applied to both phase 1 and phase 2 as they should be different.
  - a) Existing
  - b) Future (?) Alternative-1 background
  - c) Future (?) Alternative-2 background
  - d) Future (?) Alternative 1-Phase

A666

3. The assumptions used in the TIA (background development, growth rates, ...) must be altered to fit the scenario under examination.
4. PHF factor has been inconsistently used in the Synchro analysis.
5. The analysis on Table 1 shows improved LOS and delay under the "proposed special exception" scenario, which presumably generates more vehicles, when compared to the "approved zoning". If the author is referring to only Phase 1 of the development then the table makes sense and must be spelled out in the TIA. However if "proposed special exception" includes full build out then the improved LOS and delay must be explained.
6. Mitigation measures should be developed for unacceptable approaches at the following intersections indicated on Table 1.
  - a. South Point Dr / Gum Spring Rd.,
  - b. Tall Cedars Rd. / West Spine / Gum Spring Rd., and
  - c. South Point Dr. / West Spine Rd.
7. Figure 5 "Base Traffic Volumes" – the figure shows the existing plus growth plus background traffic for Alternative 1 and Alternative 2. The expectation is that total entry / exit traffic volume into the network would be fairly equal in both alternatives. However, entry / exit volumes to/from east and south of the network are different between the two alternatives by a large order of magnitude. Please explain.

Please contact me at (703) 383-2041 if additional information is needed.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Walker', with a long horizontal stroke extending to the left.

Thomas B. Walker  
Senior Transportation Engineer

## Memorandum

**To:** Tom Walker

**From:** Arsalan (Alex) Faghri

**CC:** Jim R. Turner, P.E.

**Date:** 09/02/2008

**Re:** RUID 10085 – West Spine Plaza – SPEX 07-0029

---

We have reviewed second submission Traffic Impact Analysis (TIA) associated with the subject location. The TIA has been performed in support of the special exception application for the site.

The TIA was originally submitted on March 1, 2007 and therefore the development and review process is not subject to Virginia Traffic Impact Analysis Regulations, 24 VAC 30-155.

West Spine Plaza is located south of Rt. 50 and east of existing Gum Spring Road in Loudoun County, Virginia. It is consisted of approximately 20.2 acres, and is currently zoned for Commercial / Light Industrial use.

Under the current zoning, the property would consist of 100 KSF general light industrial, 110 KSF general office space, and a 100 room hotel use. However, the applicant proposes to obtain special exception that would allow the site to include a bank, restaurant, and gas station with convenience store and car wash.

Access to the site would be provided through the planned West Spine Road that bisects the property and connects Gum Spring Road south of Tall Cedars Pkwy to Rt. 50. Project build out year is 2015.

Two alternatives have been studied:

Alternative 1.

- a) Full access at the intersection of Gum Spring Road and Rt. 50
- b) Right out only at the intersection of West Spine Road and Rt. 50.
- c) One-way north only on West Spine Road from south of Tall Cedars to Rt. 50.

Alternative 2.



- a) Gum Spring would cul-de-sac north of Tall Cedars.
- b) Full access at the intersection of Rt. 50 and West Spine Road.
- c) Stop control at Existing Gum Spring Road and Rt. 50 and limited to right-in right-out only movements.

We offer the following comments:

1. The use of delay and LOS is not an appropriate choice when comparing different traffic control devices. The definition of delay and thresholds for LOS are different when comparing a stop controlled intersection and a signal control intersection. We recommend comparing queue lengths at intersections where two different traffic controls is being compared.
2. Please include a narrative, within the TIA, explaining the assumptions used for the proposed traffic patterns. Some of these movements seem illogical. For example:
  - a) At the intersection of Rt. 50 and Gum Spring Road, the southbound left and thru movements are obliterated in Alternative 2. Please explain where would traffic from these movements go?
  - b) How would traffic on northbound Rt. 50 and Gum Spring Road who want to go thru or left would operate?
3. The intent for developing two alternatives for the TIA is to examine each alternative independently and determine traffic impacts and improvements for each alternative separately. The study includes improvements for Alternative 2, however it fails to analyze and determine needed improvements for Alternative 1. We recommend the TIA to include improvements for Alternative 1, similar to what has been done for Alternative 2.
4. Short cycle lengths used in the analysis are unacceptable. Please revise Synchro analysis to indicate appropriate cycle lengths.
5. Synchro outputs show numerous movements operating at LOS D or lower. Recommendation for improvements should include every movement that operate at LOS D or lower.
6. The TIA should include left and right turn lane warrant analysis for critical movements based on VDOT guidelines. Capacity analysis alone is not sufficient to determine the number of left or right turn lanes.

We have stamped the study as **correct and resubmit**. We are retaining the one copy you provided for our records. Please feel free to call if you have any question.



# COMMONWEALTH of VIRGINIA

DAVID S. EKERN, P.E.  
COMMISSIONER

## DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway  
Chantilly, VA 20151  
(703) 383-VDOT (8368)

December 5, 2007



Ms. Nicole Steele, Project Manager  
County of Loudoun  
Department of Planning  
1 Harrison Street, S.E.  
P.O. Box 7000  
Leesburg, Virginia 20177-7000

Re: West Spine Plaza  
Loudoun County Application Number SPEX 2007-0029

Dear Ms. Steele:

We have reviewed the above noted application as requested in your October 26, 2007 transmittal and we offer the following comments.

1. Table 1, under 2010 PM Proposed Special Exception scenario for the intersection of West Spine Plaza access and West Spine Road, the NB movement should be a LOS C with delay of 19.6. Furthermore, the Synchro file shows a "Min Error." Please fix the Synchro and report the correct LOS and delay in the table.
2. Table 1, the ADT for Bank use should be 1109.
3. In the Synchro files, By-Right AM for WBR at the intersection of Rt. 50 and West Spine is incorrectly inputted as 458. Please modify to show 151 vehicles for this movement.
4. Figure 6 – 2010 Special Exception volumes, some of the movements at the intersection of West Spine Road and West Spine Plaza access show a decrease comparing to the 2010 Approved Zoning volumes. Given that the proposed special exception generates significantly more volume, the expectation is to see an increase

West Spine Plaza, Page Two

in volume especially at the access point to the site. Please verify the accuracy of these volumes.

5. The study has determined the need for a dual eastbound left turn lane at the intersection of Rt. 50 and West Spine. However, there is only a proffer, by Van Metre, for a single left turn lane at this intersection. Please include verbiage as how the additional required left turn lane would be incorporated.
6. Figure 6 – The left turn volume on some movements along the network is close or exceeds 300 vph. Additionally Synchro indicates excessive 95<sup>th</sup> percentile queue lengths for some of these movements. We recommend performing a left turn lane analysis to determine the required number of left turn lanes at the intersections. These movements include:
  - a. eastbound left at the intersection of West Spine Plaza access and West Spine Road,
  - b. southbound left at the intersection of West Spine Plaza access and West Spine Road (pending recalculation of volumes as a result of comment 4 above),
  - c. northbound left at the intersection of Tall Cedars Parkway and West Spine Road, and
  - d. eastbound left at the intersection of Tall Cedars Parkway and West Spine Road.

We have stamped the study as correct and resubmit. If you have any questions, please call me at (703) 383-2041.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. B. Walker', with a long horizontal line extending to the left.

Thomas B. Walker  
Senior Transportation Engineer

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Loudoun County, Virginia  
**Department of Fire, Rescue and Emergency Management**

803 Sycolin Road, Suite 104 Leesburg, VA 20175  
Phone 703-777-0333 Fax 703-771-5359



## Memorandum

**To:** Steven Gardner, Project Manager  
**From:** Maria Figueroa Taylor, Fire-Rescue Planner  
**Date:** February 10, 2009  
**Subject:** West Spine Plaza, Third Referral  
SPEX 2007-0029



Thank you for the opportunity to review the third submission of the above-captioned application. Staff has no comments.

If you have any questions or need additional information, please contact me at 703-777-0333.

C: Project file





**LOUDOUN COUNTY, VIRGINIA**  
**Department of Fire, Rescue and Emergency Management**

803 Sycolin Road, Suite 104 Leesburg, VA 20175  
Phone 703-777-0333 Fax 703-771-5359



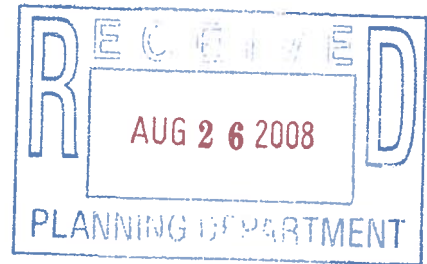
## MEMORANDUM

**To:** Steven Gardner, Project Manager  
**From:** Maria Figueroa Taylor, Fire-Rescue Planner  
**Date:** August 21, 2008  
**Subject:** West Spine Plaza, Second Referral  
SPEX 2007-0029

Thank you for the opportunity to review the applicant's response to first referral comments dated December 7, 2007 regarding above-captioned application. The Applicant adequately addressed our concerns and we have no further comments.

If you have any questions or need additional information, please contact me at 703-777-0333.

C: Project file





LOUDOUN COUNTY, VIRGINIA  
Department of Fire, Rescue and Emergency Management

803 Sycolin Road, Suite 104 Leesburg, VA 20175  
Phone 703-777-0333 Fax 703-771-5359



## MEMORANDUM

**To:** Steven Gardner, Project Manager  
**From:** Maria Figueroa Taylor, Fire-Rescue Planner  
**Date:** December 7, 2007  
**Subject:** West Spine Plaza  
SPEX 2007-0029

Thank you for the opportunity to review the above-captioned application. The Fire and Rescue Planning Staff, in agreement with the Fire Marshal's Office, has no objection to the application as presented. Staff respectfully requests however, that the Applicant would consider providing emergency vehicle access to the rear of building C.

If you have any questions or need additional information, please contact me at 703-777-0333.

C: Project file



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Environmental Health  
Phone: 703 / 777-0234  
Fax: 703 / 771-5023

## Loudoun County Health Department

P.O. Box 7000  
Leesburg VA 20177-7000



Community Health  
Phone: 703 / 777-0236  
Fax: 703 / 771-5393

August 18, 2008

**MEMORANDUM TO:** Stephen Gardner, Project Manager MSC # 62  
Planning Department, Building & Development

**FROM:** John P. Dayton MSC #68  
Sr. Env. Health Specialist  
Division Of Environmental Health

**SUBJECT:** SPEX 2007-0029, West Spine Plaza  
LCTM: 101/41, PIN 204 20 3829

This Department reviewed the package and plat, prepared by Huntley Nyce & Associates revised **02-10-2008**, and has no comment to the proposal.

If further information or clarification on the above project is required, please contact John Dayton at 737-8848.

JPD/JEL/jpd



ATTACHMENT 19



Environmental Health  
Phone: 703 / 777-0234  
Fax: 703 / 771-5023

## Loudoun County Health Department

P.O. Box 7000  
Leesburg VA 20177-7000



Community Health  
Phone: 703 / 777-0236  
Fax: 703 / 771-5393

November 16, 2007

**MEMORANDUM TO:** Nicole Steele, Project Manager MSC # 62  
Planning Department, Building & Development

**FROM:** John P. Dayton MSC #68  
Sr. Env. Health Specialist  
Division Of Environmental Health

**SUBJECT:** SPEX 2007-0029, West Spine Plaza  
LCTM: 101/41, PIN 204 20 3829

This Department reviewed the plat, prepared by Huntley Nyce & Associates revised 7/27/07, and recommends approval with the following comments/conditions to the proposal.

- 1) All the proposed lots and structures are properly served by public water and public sewer.

If further information or clarification on the above project is required, please contact John Dayton at 737-8848.

JPD/JEL/jpd







880 Harrison Street, SE • P.O. Box 4000 • Leesburg, Virginia 20177-1403 • [www.lcsa.org](http://www.lcsa.org)

November 7, 2007

Ms. Nicole Steele  
Department of Planning  
1 Harrison Street, S.E.  
P. O. Box 7000  
Leesburg, Virginia 20177-7000

Re: **SPEX-2007-0029, West Spine Plaza**

Dear Ms. Steele:

The Sanitation Authority has reviewed the referenced Special Exception application and offers no objection to the proposed use. Should offsite easements be required to extend public water and/or sanitary sewer to this site, the applicant shall be responsible for acquiring such easements and dedicating them to the Authority at no cost to the County or to the Authority.

Public water and sanitary sewer service would be contingent upon the developer's compliance with the Authority's Statement of Policy; Rates, Rules and Regulations; and Design Standards. Should you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Julie Atwell". The signature is written in a cursive, flowing style.

Julie Atwell  
Engineering Administrative Specialist



ATTACHMENT 1 *h*

Dale C. Hammes, P.E.  
General Manager/Treasurer

Richard C. Thoesen, P.E.  
Deputy General Manager

Administration 703-771-1095 • Metro 703-478-8016 • Fax 703-777-9223 • Customer Service 703-771-1092 • Metro 703-478-8677 • Fax 703-771-4141

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